[ORAL ARGUMENT NOT YET SCHEDULED]

No. 20-1489

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OGLALA SIOUX TRIBE and ALIGNING FOR RESPONSIBLE MINING,

Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,

Respondents,

and POWERTECH (USA), INC.,

Intervenor.

PETITION FOR REVIEW OF FINAL ORDER OF THE UNITED STATES NUCLEAR REGULATORY COMMISSION

JOINT APPENDIX
VOLUME 2

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Richard F. Cole
Dr. Mark O. Barnett

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH (USA), INC.
(Dewey-Burdock In Situ Uranium
Recovery Facility) **August 5, 2010**

RULES OF PRACTICE: STANDING TO INTERVENE

A petitioner's participation in a licensing proceeding hinges on a demonstration that the petitioner has standing. Section 189a of the Atomic Energy Act of 1954 (AEA), 42 U.S.C. §§ 2011 to 2297h-13 (2006), mandates that the NRC provide a hearing "upon the request of any person whose interest may be affected by the proceeding." *Id.* § 2239(a)(1)(A). The Commission's regulations specify that a petition for review and request for hearing must include a showing that the petitioner has standing and that the Board should consider (1) the nature of the petitioner's right under the AEA or the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 (2006), to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest. 10 C.F.R. § 2.309(a), (d)(1)(ii)-(iv).

RULES OF PRACTICE: STANDING TO INTERVENE

The Commission customarily follows judicial concepts of standing. *Quivira*

Mining Co. (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998) (citing *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976)). In order to establish standing in federal court, a party must show three key elements: injury-in-fact, causation, and redressability. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). As the Commission has stated, standing requires that a petitioner allege "a particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision." *Quivira*, CLI-98-11, 48 NRC at 6 (citing *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)).

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

In proceedings involving nuclear power reactors a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and redressability if the petitioner lives within 50 miles of the nuclear power reactor. *See, e.g., Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989) (observing that the presumption applies in proceedings for nuclear power plant "construction permits, operating licenses, or significant amendments thereto"). However, no such proximity presumption applies in source materials cases such as this one. *See USEC Inc.* (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311-12 (2005).

RULES OF PRACTICE: STANDING TO INTERVENE (INJURY IN FACT)

Under judicial concepts of standing, a petitioner must suffer from, or be in imminent danger of suffering, an injury-in-fact. The Supreme Court has defined injury-in-fact as "an invasion of a legally protected interest which is . . . concrete and particularized and actual or imminent rather than conjectural or hypothetical." *Lujan*, 504 U.S. at 560. An injury-in-fact must go beyond generalized grievances to affect a petitioner "in a personal and individual way." *Id.* at 560 n.1. Thus, standing generally has been denied when the threat of injury is not concrete and particularized. *See, e.g., Whitmore v. Arkansas*, 495 U.S. 149, 158-59 (1990); *Los Angeles v. Lyons*, 461 U.S. 95, 105-06 (1983).

RULES OF PRACTICE: STANDING TO INTERVENE (ZONE OF INTERESTS)

A petitioner's claimed injury must be arguably within the zone of interests protected by the governing statute in the proceeding. *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195-96 (1998). "In order to determine whether an interest is in the 'zone of interests' of a statute, it is necessary 'first [to] discern the interests "arguably . . . to be protected" by the statutory provision at issue,' and 'then [to] inquire whether the [petitioner's] interests affected by the agency action are among them.'" *U.S. Enrichment Corp.* (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 273 (2001) (citing *National Credit Union Administration v. First National Bank*, 522 U.S. 479, 492 (1998)).

RULES OF PRACTICE: STANDING TO INTERVENE (CAUSATION)

To establish causation, a petitioner must show that there is "a causal connection between the injury and the conduct complained of — the injury has to be 'fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court.'" *Lujan*, 504 U.S. at 560 (citing *Simon v. Eastern Kentucky Welfare Rights Organization*, 426 U.S. 26, 41-42 (1976)). In source materials cases, the petitioner has the burden of showing a "specific and plausible means" by which the proposed license activities may affect him or her. *See American Centrifuge*, CLI-05-11, 61 NRC at 311-12 ("Where there is no 'obvious' potential for [offsite] harm, . . . [the petitioner] must show a 'specific and plausible means' of how the challenged action may harm him or her." (internal citations omitted)). Petitioners must therefore demonstrate a plausible chain of causation between the licensed activity and the alleged injury. A Board's determination of standing does "not depend[ ] on whether the cause of the injury flows directly from the challenged action, but whether the chain of causation is plausible." *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 (1994). *See also Crow Butte Resources, Inc.* (*Crow Butte II*) (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 345 (2009).

RULES OF PRACTICE: STANDING TO INTERVENE (REDRESSABILITY)

The third requirement necessary for a petitioner to demonstrate standing is redressability. Redressability requires a petitioner to show that its alleged injury-in-fact could be cured or alleviated by some action of the tribunal. *Sequoyah*

Fuels Corp. (Gore, Oklahoma Site Decommissioning), CLI-01-2, 53 NRC 9, 13-14 (2001); *Westinghouse Electric Corp.* (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 331 (1994). For example, if a petitioner showed that the modification or denial of the Application would mitigate or eliminate her alleged injuries, then she would have satisfied the redressability requirement.

RULES OF PRACTICE: STANDING (ORGANIZATIONS)

While an individual may establish standing by satisfying the foregoing criteria, an organization, such as an environmental group, state or local government, or Indian Tribe, must satisfy one of two additional criteria. It must demonstrate either "organizational" standing or "representational" standing. *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995) ("An organization may base its standing on either immediate or threatened injury to its organizational interests, or to the interests of identified members. To derive standing from a member, the organization must demonstrate that the individual member has standing to participate, and has authorized the organization to represent his or her interests." (internal citations omitted)).

RULES OF PRACTICE: STANDING (ORGANIZATIONAL STANDING)

To establish organizational standing under 10 C.F.R. § 2.309(d)(1), an organization must demonstrate that (1) the action at issue will cause an injury-in-fact to the organization's interests and (2) the injury is within the zone of interests protected by NEPA or the AEA. *See Sierra Club v. Morton*, 405 U.S. 727, 739 (1972); *Georgia Tech*, CLI-95-12, 42 NRC at 115; *Yankee Atomic*, CLI-98-21, 48 NRC at 194-95; *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), ALAB-952, 33 NRC 521, 530 (1991). To assert an appropriate injury for organizational standing, an organization must demonstrate a palpable injury in fact to its organizational interests. *Turkey Point*, ALAB-952, 33 NRC at 530. The Supreme Court in *Sierra Club v. Morton*, 405 U.S. 727, explained that the injury-in-fact necessary to establish organizational standing must be more than "a mere 'interest in a problem,' no matter how longstanding the interest and no matter how qualified the organization is in evaluating the problem . . . ." *Id.* at 739. Instead, an organization must go beyond asserting an injury to a broad, generalized interest — i.e., an interest in protecting the environment, an interest in preserving national parks — and establish that it is suffering, or will suffer, from a specific, concrete harm caused by a third party.

RULES OF PRACTICE: STANDING (REPRESENTATIONAL STANDING)

An organization asserting "representational" standing must (1) demonstrate that the interest of at least one of its members will be harmed; (2) demonstrate that the member would have standing in his or her own right; (3) identify that member by name and address; and (4) demonstrate that the organization is authorized to request a hearing on behalf of that member. *See GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 194 (2000); *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000). Representational standing is based on an alleged harm to an organization's members, whereas organizational standing involves an alleged harm to the organization itself.

RULES OF PRACTICE: STANDING TO INTERVENE (PROXIMITY PRESUMPTION)

In cases involving ISL uranium mining and other source materials licensing, a petitioner must demonstrate the requisite elements of standing, i.e., injury, causation, and redressability, because the Commission has held that proximity to the proposed facility alone is not adequate to demonstrate standing. *See Consumers Energy Co.* (Big Rock Point Independent Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007); *International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-98-6, 47 NRC 116, 117 n.1 (1998).

RULES OF PRACTICE: STANDING TO INTERVENE

The Commission has placed the burden on the petitioner to allege a "specific and plausible means" by which contaminants from mining activities may adversely affect him or her, *Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004) (citing *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-00-5, 51 NRC 90, 98 (2000)); that is to say, each individual Petitioner must show that there is a "specific and plausible means" by which contaminants from the applicant's proposed mine will reach the aquifer or surface waters from which that Petitioner draws water.

RULES OF PRACTICE: STANDING TO INTERVENE

In *HRI*, the Board held that standing can be granted to a petitioner in a materials licensing case where that petitioner "uses a substantial quantity of water personally or for livestock from a source that is reasonably contiguous to either the injection or processing sites," as such a showing demonstrates a plausible

injury-in-fact. *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 275 (1998). Where no petitioner claims to live on or immediately adjacent to the applicant's proposed mining site, the Board must determine whether the individual Petitioners have presented sufficient evidence to establish that a plausible pathway exists through which contaminants could migrate from the proposed mining site to the Petitioners' water sources. *See Crow Butte II*, CLI-09-9, 69 NRC at 345.

RULES OF PRACTICE: STANDING (BURDEN OF PROOF)

A Board's standing analysis must "avoid 'the familiar trap of confusing the standing determination with the assessment of a petitioner's case on the merits.'" *HRI*, LBP-98-9, 47 NRC at 272 (citing *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-5, 39 NRC 54 (1994)). Petitioners are not required to demonstrate their asserted injury with certainty at this stage, or to "provide extensive technical studies" in support of their standing argument. *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 31 (1999) (citing *Sequoyah Fuels*, CLI-94-12, 40 NRC at 72). Such determinations are reserved for adjudication of the merits. A determination that "the injury is fairly traceable to the [challenged] action . . . [does] not depend[ ] on whether the cause of the injury flows directly from the challenged action, but *whether the chain of causation is plausible.*" *Sequoyah Fuels*, CLI-94-12, 40 NRC at 75 (emphasis added).

RULES OF PRACTICE: STANDING (REPRESENTATIONAL STANDING)

An individual petitioner may not request to intervene in his or her own right while simultaneously authorizing other petitioners to represent his or her interests in the proceeding. The Commission has stated that such multiple representation might lead to confusion as to whether the individual or the organization was speaking for the petitioner. *Big Rock*, CLI-07-19, 65 NRC at 426 (citing *Northern States Power Co.* (Pathfinder Atomic Plant), LBP-89-30, 30 NRC 311, 316 (1989) ("[A petitioner] can have her interest protected by participating as an individual or by having [an organization] represent her interest. It would be detrimental to the process to have a person appear in the proceeding individually and to be represented by an organization. . . .")).

RULES OF PRACTICE: STANDING TO INTERVENE (NATIVE AMERICAN TRIBE)

A federally recognized Indian tribe may seek to participate in this proceeding as provided in 10 C.F.R. § 2.309(d)(2). However, where the proposed facility will not be located within the Tribe's boundaries, the Tribe must meet the standing requirements imposed by 10 C.F.R. § 2.309(d)(1) by showing "a concrete and particularized injury that is . . . fairly traceable to the challenged action and [is] likely to be redressed by a favorable decision." *See, e.g.*, *Yankee Atomic*, CLI-98-21, 48 NRC at 195; *Georgia Tech*, CLI-95-12, 42 NRC at 115; *Perry*, CLI-93-21, 38 NRC at 92 (citing *Lujan*, 504 U.S. at 561).

RULES OF PRACTICE: STANDING TO INTERVENE (ZONE OF INTERESTS)

The preservation of Native American cultural traditions is a protected interest under federal law. *See Havasupai Tribe v. United States*, 752 F. Supp. 1471 (D. Ariz. 1990); *United States ex rel. Chunie v. Ringrose*, 788 F.2d 638 (9th Cir. 1986); *United States v. Pend Oreille County Public Utility District No. 1*, 585 F. Supp. 606 (D. Wash. 1984); *Ute Indians v. United States*, 28 Fed. Cl. 768 (1993). If this interest is endangered or harmed, it qualifies as a cognizable injury for AEA standing purposes under *Crow Butte II.*

RULES OF PRACTICE: STANDING TO INTERVENE (ZONE OF INTERESTS)

Section 106 of the NHPA provides the Tribe with a procedural right to protect its interests in cultural resources. The Supreme Court has held that a party claiming violations of this procedural right is to be accorded a special status when it comes to standing: "The person who has been accorded a procedural right to protect his concrete interests can assert that right without meeting all the normal standards for redressability and immediacy." *Lujan*, 504 U.S. at 572 n.7. To establish an injury-in-fact, a party merely has to show "some threatened concrete interest personal" to the party that NHPA was designed to protect. *Nulankeyutmonen Nkihtaqmikon v. Impson*, 503 F.3d 18 (1st Cir. 2007) (citing *Lujan*, 504 U.S. at 572-73 nn.7-8).

RULES OF PRACTICE: STANDING TO INTERVENE (ZONE OF INTERESTS)

Federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has

imposed on federal agencies a consultation requirement under the NHPA to ensure the protection of tribal interests in cultural resources.

RULES OF PRACTICE: CONTENTIONS

In order to participate as a party in a proceeding before the Board, a petitioner must not only establish standing, but must also proffer at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f)(1). *See* 10 C.F.R. § 2.309(a). An admissible contention must: (i) provide a specific statement of the legal or factual issue sought to be raised; (ii) provide a brief explanation of the basis for the contention; (iii) demonstrate that the issue raised is within the scope of the proceeding; (iv) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (v) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing; and (vi) provide sufficient information to show that a genuine dispute exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or, in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. *Id.* § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

The purpose of these section 2.309(f)(1) requirements is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). The Commission has stated that "the hearing process [is intended only for] issues that are 'appropriate for, and susceptible to, resolution in an NRC hearing.'" *Id.* Furthermore, "[w]hile a board may view a petitioner's supporting information in a light favorable to the petitioner . . . the petitioner (not the board) [is required] to supply all of the required elements for a valid intervention petition." *AmerGen Energy Co.* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009).

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

The rules on contention admissibility are "strict by design." *See, e.g.*, *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001);

Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999). Further, absent a waiver, contentions challenging applicable statutory requirements or Commission regulations are not admissible in agency adjudications. 10 C.F.R. § 2.335(a). Failure to comply with any of these requirements is grounds for not admitting a contention. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

A contention of omission claims that "the application fails to contain information on a relevant matter as required by law . . . and [provides] the supporting reasons for the petitioner's belief." 10 C.F.R. § 2.309(f)(1)(vi). To satisfy section 2.309(f)(1)(i)-(ii), the contention of omission must describe the information that should have been included in the ER and provide the legal basis that requires the omitted information to be included. The petitioner must also demonstrate that the contention is within the scope of the proceeding. *Id.* § 2.309(f)(1)(iii).

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

Section 2.309(f)(1)(v) requires the petitioner to provide a concise statement of the alleged facts that support its position and upon which the petitioner intends to rely at the hearing. However, "the pleading requirements of 10 C.F.R. § 2.309(f)(1)(v), calling for a recitation of facts or expert opinion supporting the issue raised, are inapplicable to a contention of omission beyond identifying the legally required missing information." *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294, 317 (2008) (quoting *Pa'ina Hawaii, LLC*, LBP-06-12, 63 NRC 403, 414 (2006)). Thus, for a contention of omission, the petitioner's burden is only to show the facts necessary to establish that the application omits information that should have been included. The facts relied on need not show that the facility cannot be safely operated, but only that the application is incomplete.

If an applicant cures the omission, the contention will become moot. *North Anna*, LBP-08-15, 68 NRC at 317; *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 (2002).

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

If the contention makes a *prima facie* allegation that the application omits information required by law, "it necessarily presents a genuine dispute with the Applicant on a material issue in compliance with 10 C.F.R. § 2.309(f)(1)(vi) [and] . . . raises an issue plainly material to an essential finding of regulatory compliance needed for license issuance," *Pa'ina*, LBP-06-12, 63 NRC at 414, in accordance with section 2.309(f)(1)(iv).

RULES OF PRACTICE: CONTENTIONS (BURDEN OF GOING FORWARD)

A petitioner, especially one represented by counsel, bears the burden of going forward and specifically addressing each of the six elements in 10 C.F.R. § 2.309(f)(1) for each contention proffered. A single sentence labeled a contention, with no reference to the six elements of section 2.309(f)(1), does not an admissible contention make.

RULES OF PRACTICE: CONTENTIONS (BURDEN OF GOING FORWARD)

Commission case law supports the conclusion that it is not the Board's duty to forage through a petition in order to find statements or other support that may be located in various portions of the petition but not referenced in the contention. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 240-41 (1989) ("The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point. The Commission cannot be faulted for not having searched for a needle that may be in a haystack."). A properly pled contention needs to lay out explicitly the required criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi) in order to be admissible, 69 Fed. Reg. at 2221; a licensing board cannot be expected to go on a veritable scavenger hunt to find the missing pieces needed for an admissible contention.

RULES OF PRACTICE: CONTENTIONS (MATERIALITY)

Issues of disorganization in an application cannot be said to be germane to the licensing process. According to the Board in *HRI*, "[a]ny area of concern is germane if it is relevant to whether the license should be denied or conditioned." LBP-98-9, 47 NRC at 280. The organization or format of an application was not

considered by that Board to be germane because the objection to the application's organization was not an objection to the licensing action at issue in the proceeding.

RULES OF PRACTICE: CONTENTIONS (BURDEN OF GOING FORWARD)

It is not within the province of a Licensing Board to piece together and create an admissible contention from a lengthy petition with numerous affidavits, declarations, and exhibits in an effort to create a viable contention. Rather, it is the responsibility of the petitioner to submit a contention containing all six elements required by 10 C.F.R. § 2.309(f)(1) in an orderly and organized fashion. Simply put, it is a petitioner's burden of going forward at this stage of the proceeding to submit a complete, self-contained contention addressing each of the elements required by 10 C.F.R. § 2.309(f)(1). To be admissible, a contention must comply with every requirement listed in 10 C.F.R. § 2.309(f)(1).

NEPA: REQUIREMENTS

While the duty to comply with NEPA falls upon the agency and not upon the applicant or licensee, *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010), the requirements of Part 51 must be met by the applicant. Section 51.45 clearly requires an applicant to discuss in its ER "[t]he impact of the proposed action on the environment." 10 C.F.R. § 51.45(b)(1). Since an impact analysis under NEPA requires that cultural and historic resources be considered, we conclude that a sufficient discussion of cultural and historic resources must be included in an applicant's ER.

NEPA: AGENCY RESPONSIBILITIES

As the Commission made clear in *Crow Butte II*, it is not the duty of an applicant to consult with a Tribe regarding cultural resources at a proposed site, but instead is the duty of the agency to initiate and follow through with the consultation process. 36 C.F.R. § 800.2(c)(2)(ii)(D) (stating that "[w]hen Indian tribes . . . attach religious and cultural significance to historic properties off tribal lands, section 101(d)(6)(B) of the act requires *Federal agencies* to consult with such Indian tribes . . ." (emphasis added)). The alleged failure to consult in this proceeding, therefore, cannot be the fault of the applicant. And, because the NRC Staff has not completed its environmental review of the proposed project, this Board cannot find that they have been dilatory in their duty to consult with the Tribe. As noted by the Commission in its *Crow Butte II* ruling, the Tribe is free to file a contention later on in this proceeding if, after the Staff releases its

environmental documents, the Tribe believes that the Staff has failed to satisfy its obligations under NEPA and the NHPA. *Crow Butte II*, CLI-09-9, 69 NRC at 351.

MATERIALS LICENSE UNDER PART 40: APPLICABILITY OF REQUIREMENTS

Commission precedent makes clear that 10 C.F.R. § 40.31(h) applies to uranium mills, and not to ISL facilities. *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 8 (1999). In fact, the Commission has held that, while Part 40 generally applies to ISL mining, Appendix A to Part 40, including Criterion 1, was "designed to address the problems related to mill tailings and not problems related to injection mining." *Id.* (citing *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-99-1, 49 NRC 29, 33 (1999)). There are, however, certain safety provisions in Appendix A, such as Criterion 2, that are relevant and do apply to ISL mining. *Id.* The Presiding Officer in *HRI* concluded that the principal regulatory standards for ISL applications are 10 C.F.R. § 40.32(c) and (d), "which mandate protection of public health and safety," *HRI*, CLI-99-22, 50 NRC at 9; an exceedingly general requirement.

NEPA: REQUIREMENTS

It is settled law that an applicant is not bound by NEPA, but by NRC regulations in Part 51. *Levy County*, CLI-10-2, 71 NRC at 34. The NRC Staff, however, is bound by NEPA.

NEPA: CEQ REGULATIONS

While this agency gives substantial deference to CEQ regulations, it is not bound to follow them. *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-19, 64 NRC 53, 62 n.3 (2006) (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002)). As an independent agency, the NRC has the authority to promulgate its own regulations implementing NEPA and is only bound by CEQ regulations when the NRC expressly adopts them. *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-06-8, 63 NRC 241, 257 n.14 (2006); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 154 (2005). The NRC has recognized its obligation to comply with NEPA, however, and has promulgated the regulations in Part 51, which govern "the consideration of the environmental impact of the

licensing and regulatory actions of the agency." *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 725 (3d Cir. 1989).

NEPA: CONTENTIONS

RULES OF PRACTICE: CONTENTIONS (IMPERMISSIBLE CHALLENGE TO NRC REGULATIONS)

The regulations clearly state that a petitioner must file a NEPA contention challenging an applicant's ER at the time the petitioner requests a hearing. 10 C.F.R. § 2.309(f)(2) ("On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report."). Any challenge to this regulation is not litigable in this proceeding, and cannot be admitted as a contention under 10 C.F.R. § 2.335. Absent a showing of "special circumstances" under 10 C.F.R. § 2.335(b), this matter must be addressed through Commission rulemaking.

NEPA: AGENCY RESPONSIBILITIES

In the context of the NEPA review process, the duty of the lead agency to consider the actions of other federal agencies involved in a licensing action, is the responsibility of the NRC and not of the applicant. *Levy County*, CLI-10-2, 71 NRC at 34.

RULES OF PRACTICE: SELECTION OF HEARING PROCEDURES

As required by 10 C.F.R. § 2.310(a), upon admission of a contention in a licensing proceeding, the Board must identify the specific hearing procedures to be used to settle the contention. NRC regulations provide for a number of different hearing procedures. First, there is Subpart G, 10 C.F.R. Part 2, which is mandated for certain proceedings, *see, e.g., id.* § 2.310(d). and establishes NRC "Rules for Formal Adjudications," in which parties are permitted to "propound interrogatories, take depositions, and cross-examine witnesses without leave of the Board." *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 201-02 (2006). Second, there is Subpart L, 10 C.F.R. Part 2, which provides for more "informal" proceedings in which discovery is generally prohibited (except for (1) specified mandatory disclosures under 10 C.F.R. § 2.336(f), (a), and (b); and (2) the mandatory production of the hearing file under 10 C.F.R. § 2.1203(a)). *Id.* § 2.1203(d). Under Subpart L, the Board has the primary responsibility for questioning the witnesses at any evidentiary hearing. *Id.* § 2.1207(b)(6).

RULES OF PRACTICE: SELECTION OF HEARING PROCEDURES

The selection of hearing procedures for contentions at the outset of a proceeding is not immutable because, *inter alia*, the availability of Subpart G procedures under 10 C.F.R. § 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. § 2.336(a)(1), until *after* contentions are admitted. *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 272 (2007); *see also* 10 C.F.R. § 2.1402(b).

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MEMORANDUM AND ORDER
(Ruling on Petitions to Intervene and Requests for Hearing)

I. INTRODUCTION

Before this Board are two petitions to intervene and requests for a hearing. The first petition was filed by six individuals and two organizations sharing common counsel (Consolidated Petitioners),[1] and the second was filed by the Oglala Sioux Tribe (Oglala Sioux or Tribe).[2] These petitions to intervene and requests for hearing challenge an application submitted by Powertech (USA), Inc. (Powertech) requesting a license to construct and to operate a proposed in-situ

[1] Consolidated Request for Hearing and Petition for Leave to Intervene (Mar. 8, 2010) (ADAMS Accession No. ML100680010) (Petition). David Frankel, Esq., filed the Petition on his own behalf and on behalf of the following persons and organizations: Theodore P. Ebert, Gary Heckenlaible, Susan Henderson, Dayton Hyde, Lilias C. Jones Jarding, the Clean Water Alliance, and Aligning for Responsible Mining. *Id.* at 1.

[2] Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (Apr. 6, 2010) (ADAMS Accession No. ML100960645) (Tribe Petition).

leach uranium recovery (ISL) facility in Custer and Fall River Counties, South Dakota.[3] This facility is to be known as the Dewey-Burdock ISL facility.

Notice of the Powertech license application (Application) was published in the *Federal Register* on January 5, 2010.[4] That publication provided interested parties notice of the Application and the opportunity to request a hearing.

In this Memorandum and Order, we find that three individuals and the two organizations among the Consolidated Petitioners have demonstrated they have standing to participate in this proceeding, and one of their contentions as pled and three of their contentions as modified by the Board are admissible. Three other members of the Consolidated Petitioners have not demonstrated standing and are not admitted. We also find that the Oglala Sioux Tribe has shown it has standing to participate in this proceeding and three of its contentions as pled and one as modified by the Board are admissible.

Based on these findings, we grant the hearing requests of the Consolidated Petitioners and the Oglala Sioux Tribe and admit them as parties in this proceeding.

II. BACKGROUND

Powertech originally submitted an application on February 25, 2009, for a combined source[5] and 11e(2) byproduct material license[6] to construct and operate the proposed Dewey-Burdock ISL facility in the Black Hills region of South Dakota on February 25, 2009.[7] By letter dated June 19, 2009, Powertech withdrew the application in order to revise the application to provide additional NRC Staff-requested information on hydrology/site characterization, waste disposal, location of extraction operations, protection of water resources, and operational issues. Powertech resubmitted its Dewey-Burdock license application on August 10, 2009, with additional data and information requested by the NRC Staff.[8] The

[3] Powertech (USA) Inc.'s Submission of an Application for a Nuclear Regulatory Commission Uranium Recovery License for Its Proposed Dewey-Burdock In-Situ Leach Uranium Recovery Facility in the State of South Dakota (Feb. 25, 2009) (ADAMS Accession No. ML091030707).

[4] Notice of Opportunity for Hearing, License Application Request of Powertech (USA), Inc. Dewey-Burdock In Situ Uranium Recovery Facility in Fall River and Custer Counties, SD, and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information (SUNSI) for Contention Preparation, 75 Fed. Reg. 467 (Jan. 5, 2010).

[5] The Atomic Energy Act of 1954, as amended, defines "source material" in section 11(z). 42 U.S.C. § 2014. *See also* 10 C.F.R. § 40.4.

[6] The Atomic Energy Act of 1954, as amended, defines "byproduct material" in section 11(e)(2). 42 U.S.C. § 2014. *See also* 10 C.F.R. §§ 30.4 and 40.4.

[7] *See supra* note 3.

[8] Dewey-Burdock Project Supplement to Application for NRC Uranium Recovery License Dated February 2009 (Aug. 10, 2009) (ADAMS Accession No. ML092870155).

NRC Staff accepted Powertech's Application for docketing on October 2, 2009,[9] and subsequently published a January 5, 2010 notice of opportunity to request a hearing on the Application, along with instructions on how to gain access to sensitive unclassified nonsafeguards information (SUNSI) associated with the Application.[10]

On January 15, 2010, Consolidated Petitioners submitted a request for access to SUNSI material,[11] which was reviewed and denied by the NRC Staff.[12] Consolidated Petitioners then joined a motion filed by the Oglala Sioux for a 90-day extension of time to file its hearing request, which was opposed by both Powertech and the NRC Staff, and was subsequently denied by the Commission on March 5, 2010.[13] On March 8, 2010, Consolidated Petitioners filed their Request for Hearing and Petition for Leave to Intervene,[14] and this Licensing Board was established on March 12, 2010.[15] After requesting and being granted an extension of time by this Licensing Board,[16] Powertech and the NRC Staff filed their answers to the Consolidated Petition on April 12, 2010,[17] and Consolidated Petitioners filed their reply to the Powertech and NRC Staff answers on April 22, 2010.[18]

The Oglala Sioux requested access to SUNSI in this case on January 15, 2010,

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[9] Results of Acceptance Review, Powertech (USA), Inc.'s Proposed Dewey-Burdock Facility, Fall River and Custer Counties, South Dakota (Oct. 2, 2009) (ADAMS Accession No. ML092610201).

[10] *See* 75 Fed. Reg. at 467.

[11] E-mail Request from David Cory Frankel, Legal Director for Aligning for Responsible Mining, et al. for Access to Sensitive Unclassified Non-safeguards Information (SUNSI) (Jan. 15, 2010) (ADAMS Accession No. ML100192098).

[12] NRC Staff Response to David Frankel Denying Request for Access to SUNSI Information (Jan. 25, 2010) (ADAMS Accession No. ML100252219).

[13] Order of the Secretary (Mar. 5, 2010) (unpublished) (ADAMS Accession No. ML100640426).

[14] *See supra* note 1.

[15] Establishment of Atomic Safety and Licensing Board (Mar. 12, 2010) (unpublished); *see also* Powertech (USA), Inc.; Establishment of Atomic Safety and Licensing Board, 75 Fed. Reg. 13,141 (Mar. 18, 2010).

[16] *See* Joint Motion for Extension of Time for Late-Filed Contentions and to Respond to Request for Hearing (Mar. 31, 2010) (ADAMS Accession No. ML100900058); Licensing Board Order (Granting Motion for Extension of Time) (Apr. 1, 2010) (unpublished) (ADAMS Accession No. ML100910251). This Order also granted Consolidated Petitioners additional time to file new or amended contentions based on information recently released by the Staff. *Id.* at 2.

[17] Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for a Hearing/Petition for Intervention (Apr. 12, 2010) (ADAMS Accession No. ML101020722) (Powertech Answer to Petition); NRC Staff Response to Hearing Request of Consolidated Petitioners (Apr. 12, 2010) (ADAMS Accession No. ML101020723) (Staff Answer to Petition).

[18] Petitioners' Consolidated Reply to Applicant and NRC Staff Answers to Hearing Request/Petition to Intervene (Apr. 19, 2010) (ADAMS Accession No. ML101100001) (Reply).

and was granted access by the NRC Staff on January 25, 2010.[19] As a result, a Protective Order granting access to the requested information was issued by the Chief Administrative Judge of the Licensing Board Panel on March 5, 2010.[20] The Protective Order stated that the Oglala Sioux was to file its Hearing Request within 25 days of receiving the SUNSI material from the NRC Staff.[21] The Oglala Sioux timely filed its Hearing Request and Petition for Leave to Intervene on April 6, 2010.[22] Powertech and the NRC Staff timely filed answers to the Oglala Sioux Petition on May 3, 2010,[23] and the Oglala Sioux filed its reply to the Powertech and NRC Staff answers on May 14, 2010.[24]

On April 30, 2010, Consolidated Petitioners filed a new contention (designated Contention K by the Board), which they state is based on SUNSI material provided to Consolidated Petitioners' expert on April 1, 2010.[25] Answers to Contention K were timely filed by the NRC Staff and Powertech on May 21, 2010, and May 23, 2010, respectively.[26] The Consolidated Petitioners, however, did not file a reply to the Powertech and NRC Staff answers.[27]

The Board held an oral argument on standing and contention admissibility in Custer, South Dakota, on June 8 and 9, 2010.

III. THE ISL PROCESS

With this procedural backdrop established, we note by way of explanation the

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[19] *See* NRC Staff Response to Grace Dugan Granting Access to SUNSI Information (ADAMS Accession No. ML100210203) (Jan. 25, 2010).

[20] Licensing Board Order (Protective Order Governing the Disclosure of Sensitive Unclassified Non-Safeguards Information (SUNSI)), (Mar. 5, 2010) (unpublished) (ADAMS Accession No. ML100640405) (Protective Order).

[21] *Id.* at 4.

[22] *See supra* note 2.

[23] Applicant Powertech (USA) Inc.'s Response to Petitioner Oglala Sioux Tribe's Request for a Hearing/Petition for Intervention (May 3, 2010) (ADAMS Accession No. ML101230722) (Powertech Answer to Tribe); NRC Staff's Response to Oglala Sioux Tribe's Hearing Request (May 3, 2010) (ADAMS Accession No. ML101230726) (Staff Answer to Tribe).

[24] Reply to NRC Staff and Applicant Responses to the Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (May 14, 2010) (ADAMS Accession No. ML101340870) (Tribe Reply).

[25] Petitioners' Request for Leave to File a New Contention Based on SUNSI Material (Apr. 30, 2010) (ADAMS Accession No. ML101200675) (New Contention).

[26] NRC Staff's Response to Consolidated Petitioners' Contention filed April 30, 2010 (May 21, 2010) (ADAMS Accession No. ML1014105410) (Staff Answer to New Contention); Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for Leave to File a New Contention Based on SUNSI Material (May 23, 2010) (ADAMS Accession No. ML1014300009) (Powertech Answer to New Contention).

[27] Tr. at 381.

technical background to this proceeding. As described in Powertech's Application, an in situ leach facility, also known as an in situ recovery (ISR) facility, is designed to remove underground (subsurface) uranium without physical mining.[28] An aqueous solution, called a lixiviant, is injected into the naturally existing underground water (groundwater) through an injection well, which dissolves the uranium in the lixiviant. The lixiviant solution consists of oxygen, carbon dioxide, and water. The uranium-containing or pregnant lixiviant is then pumped back to the surface from a production well, where the uranium is removed from the lixiviant by a process called ion exchange. The uranium-free lixiviant is then reinjected back into the ground to dissolve more uranium, and the cycle is repeated until all of the economically recoverable uranium in the ore body has been removed.

The ion exchange resin used to remove the uranium from the lixiviant is used until its removal capacity has been exhausted. At that point, the ion exchange resin is flushed with salt water to wash the uranium from the ion exchange resin, and the resulting uranium-free ion exchange resin is reused. The uranium is then removed from the salt water solution by chemical precipitation, and the resulting uranium solids are then washed, dried, and packaged for offsite shipment. The packaged solid uranium powder is the final product of an ISL facility.

As noted above, there are both injection wells, which are used to inject the uranium-free lixiviant into the subsurface, and production wells, which are used to remove the uranium-laden lixiviant from the ground. In a typical configuration, four injection wells surround a center production well in a well field. In addition to continuously recycling the lixiviant, approximately 0.5 to 3% more groundwater is withdrawn from the production wells than is injected through the injection wells.

The purpose of withdrawing more water is to ensure that groundwater continuously flows from outside the ore zone, through the ore zone, and into the production well, which is intended to keep uranium-laden lixiviant from migrating beyond the injection wells and contaminating the surrounding groundwater. After treating the pregnant lixiviant to remove uranium (and associated radium), the bulk of the lixiviant is refortified with oxygen and carbon dioxide and reinjected into the ground through the injection well. The nominally uranium-free excess water (commonly referred to as "bleed") is either applied on the surface via irrigation or reinjected into the subsurface away from the ore zone.

In addition to injection and production wells, monitoring wells sited outside of and above the ore zone (and the associated injection and production wells)

[28] At oral argument, counsel for Powertech explained that ISL and ISR "are the same thing — just one is a newer term." Tr. at 31. Powertech's proposed uranium recovery method and process are described in section 1.7 of the Technical Report submitted with its Application (ADAMS Accession No. ML092870298).

are designed to detect any uranium that might inadvertently migrate beyond well fields. In so doing, the monitoring wells serve to detect any underground uranium leaks (excursions of lixiviant) from the ideally self-contained process.[29]

IV. STANDING OF PETITIONERS TO PARTICIPATE IN THIS PROCEEDING

A. Legal Requirements for Standing in NRC Proceedings

A petitioner's participation in a licensing proceeding hinges on a demonstration that the petitioner has standing. Section 189a of the Atomic Energy Act of 1954 (AEA)[30] mandates that the NRC provide a hearing "upon the request of any person whose interest may be affected by the proceeding."[31] The Commission's regulations specify that a petition for review and request for hearing must include a showing that the petitioner has standing and that the Board should consider (1) the nature of the petitioner's right under the AEA or the National Environmental Policy Act (NEPA)[32] to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any decision or order that may be issued in the proceeding on the petitioner's interest.[33]

The Commission customarily follows judicial concepts of standing.[34] In order to establish standing in federal court, a party must show three key elements: injury-in-fact, causation, and redressability.[35] As the Commission has stated, standing requires that a petitioner allege "a particularized injury that is fairly traceable to the challenged action and is likely to be redressed by a favorable decision."[36] In proceedings involving nuclear power reactors a petitioner is presumed to have standing to intervene without the need to specifically plead injury, causation, and

[29] For a description of the proposed facility, *see* Technical Report at 3-1 to 3-57 (ADAMS Accession No. ML092870299).

[30] 42 U.S.C. §§ 2011 to 2297h-13 (2006).

[31] *Id.* § 2239(a)(1)(A).

[32] 42 U.S.C. § 4321 (2006).

[33] 10 C.F.R. § 2.309(a), (d)(1)(ii)-(iv).

[34] *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 5-6 (1998) (citing *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 613-14 (1976)).

[35] *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

[36] *Quivira*, CLI-98-11, 48 NRC at 6 (citing *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)).

redressability if the petitioner lives within 50 miles of the nuclear power reactor.[37] However, no such proximity presumption applies in source materials cases such as this one.[38]

1. Injury-in-Fact

Under judicial concepts of standing, a petitioner must suffer from, or be in imminent danger of suffering, an injury-in-fact. The Supreme Court has defined injury-in-fact as "an invasion of a legally protected interest which is . . . concrete and particularized and actual or imminent rather than conjectural or hypothetical."[39] An injury-in-fact must go beyond generalized grievances to affect a petitioner "in a personal and individual way."[40] Thus, standing generally has been denied when the threat of injury is not concrete and particularized.[41]

Additionally, a petitioner's claimed injury must be arguably within the zone of interests protected by the governing statute in the proceeding.[42] "In order to determine whether an interest is in the 'zone of interests' of a statute, it is necessary 'first [to] discern the interests "arguably . . . to be protected" by the statutory provision at issue,' and 'then [to] inquire whether the [petitioner's] interests affected by the agency action are among them.'"[43] Generally, the AEA and NEPA are the statutes that govern proceedings before the Licensing Board. In this case, however, interests protected by the National Historic Preservation Act (NHPA)[44] are at issue as well.

2. Causation

To establish causation, a petitioner must show that there is "a causal connection between the injury and the conduct complained of — the injury has to be 'fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e]

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[37] *See, e.g.*, *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989) (observing that the presumption applies in proceedings for nuclear power plant "construction permits, operating licenses, or significant amendments thereto").

[38] *See USEC Inc.* (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311-12 (2005).

[39] *Lujan*, 504 U.S. at 560 (internal citations omitted).

[40] *Id.* at 560 n.1.

[41] *See, e.g.*, *Whitmore v. Arkansas*, 495 U.S. 149, 158-59 (1990); *Los Angeles v. Lyons*, 461 U.S. 95, 105-06 (1983).

[42] *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195-96 (1998).

[43] *U.S. Enrichment Corp.* (Paducah, Kentucky Gaseous Diffusion Plant), CLI-01-23, 54 NRC 267, 273 (2001) (citing *National Credit Union Administration v. First National Bank*, 522 U.S. 479, 492 (1998)).

[44] 16 U.S.C. § 470 to 470x-6.

result [of] the independent action of some third party not before the court.'"[45] In source materials cases, the petitioner has the burden of showing a "specific and plausible means" by which the proposed license activities may affect him or her.[46] Petitioners must therefore demonstrate a plausible chain of causation between the licensed activity and the alleged injury. A Board's determination of standing does "not depend[ ] on whether the cause of the injury flows directly from the challenged action, but whether the chain of causation is plausible."[47]

3. Redressability

The third requirement necessary for a petitioner to demonstrate standing is redressability. Redressability requires a petitioner to show that its alleged injury-in-fact could be cured or alleviated by some action of the tribunal.[48] For example, if a petitioner showed that the modification or denial of Powertech's Application would mitigate or eliminate her alleged injuries, then she would have satisfied the redressability requirement.

4. Standing of Organizations

While an individual may establish standing by satisfying the foregoing criteria, an organization, such as an environmental group, state or local government, or Indian Tribe, must satisfy one of two additional criteria. It must demonstrate either "organizational" standing or "representational" standing.[49] Organizational standing involves an alleged harm to the organization itself, whereas representational standing is based on an alleged harm to an organization's members.

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[45] *Lujan*, 504 U.S. at 560 (citing *Simon v. Eastern Kentucky Welfare Rights Organization*, 426 U.S. 26, 41-42 (1976)).

[46] *See USEC*, CLI-05-11, 61 NRC at 311-12 ("Where there is no 'obvious' potential for [offsite] harm, [the petitioner must] show a 'specific and plausible means' of how the challenged action may harm him or her." (internal citations omitted)).

[47] *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 (1994). *See also Crow Butte Resources, Inc.* (*Crow Butte II*) (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 345 (2009).

[48] *Sequoyah Fuels Corp.* (Gore, Oklahoma Site Decommissioning), CLI-01-2, 53 NRC 9, 13-14 (2001); *Westinghouse Electric Corp.* (Nuclear Fuel Export License for Czech Republic — Temelin Nuclear Power Plants), CLI-94-7, 39 NRC 322, 331 (1994).

[49] *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995) ("An organization may base its standing on either immediate or threatened injury to its organizational interests, or to the interests of identified members. To derive standing from a member, the organization must demonstrate that the individual member has standing to participate, and has authorized the organization to represent his or her interests." (internal citations omitted)).

a. Organizational Standing

To establish organizational standing under 10 C.F.R. § 2.309(d)(1), an organization must demonstrate that (1) the action at issue will cause an injury-in-fact to the organization's interests and (2) the injury is within the zone of interests protected by NEPA or the AEA.[50] To assert an appropriate injury for organizational standing, an organization must demonstrate a palpable injury in fact to its organizational interests.[51] The Supreme Court in *Sierra Club v. Morton*,[52] explained that the injury-in-fact necessary to establish organizational standing must be more than "a mere 'interest in a problem,' no matter how longstanding the interest and no matter how qualified the organization is in evaluating the problem . . . ."[53] Instead, an organization must go beyond asserting an injury to a broad, generalized interest — i.e., an interest in protecting the environment, an interest in preserving national parks — and establish that it is suffering, or will suffer, from a specific, concrete harm caused by a third party.

b. Representational Standing

Alternatively, an organization can show standing by asserting "representational" standing, i.e., that it seeks to participate in the proceeding as the authorized representative of one or more of its individual members who themselves have standing. An organization asserting "representational" standing must (1) demonstrate that the interest of at least one of its members will be harmed; (2) demonstrate that the member would have standing in his or her own right; (3) identify that member by name and address; and (4) demonstrate that the organization is authorized to request a hearing on behalf of that member.[54] Representational standing is based on an alleged harm to an organization's members, whereas organizational standing involves an alleged harm to the organization itself.

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[50] *See Sierra Club v. Morton*, 405 U.S. 727, 739 (1972); *Georgia Tech*, CLI-95-12, 42 NRC at 115; *Yankee Atomic*, CLI-98-21, 48 NRC at 194-95; *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), ALAB-952, 33 NRC 521, 530 (1991).

[51] *Turkey Point*, ALAB-952, 33 NRC at 530. *See also Hydro Resources, Inc.* (*HRI*) (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-98-9, 47 NRC 261, 269 (1998), *rev'd on other grounds*, CLI-98-16, 48 NRC 119 (1998).

[52] 405 U.S. 727.

[53] *Id.* at 739.

[54] *See GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 194 (2000); *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000).

B. Licensing Board's Ruling on Standing of Petitioners

1. Consolidated Petitioners

a. Individual Petitioners

As discussed *supra*, in cases involving ISL uranium mining and other source materials licensing, a petitioner must demonstrate the requisite elements of standing, i.e., injury, causation, and redressability, because the Commission has held that proximity to the proposed facility alone is not adequate to demonstrate standing.[55] Therefore, the Board must assess the standing claims of the individual Consolidated Petitioners, and each of the two organizations to determine whether the requisite elements for standing to intervene are met.

All of the individual Consolidated Petitioners base their claim of standing on the possibility that contaminants from Powertech's proposed ISL mining operation will contaminate the aquifer or surface waters from which Consolidated Petitioners obtain their water.[56] This is based on conclusions drawn from effects of the ISL mining process itself, which are discussed *supra*.

The Commission has placed the burden on the petitioner to allege a "specific and plausible means" by which contaminants from mining activities may adversely affect him or her;[57] that is to say, each individual Petitioner must show that there is a "specific and plausible means" by which contaminants from Powertech's proposed mine will reach the aquifer or surface waters from which that Petitioner draws water. In *Hydro Resources, Inc.*, the Board held that standing can be granted to a petitioner in a materials licensing case where that petitioner "uses a substantial quantity of water personally or for livestock from a source that is reasonably contiguous to either the injection or processing sites," as such a showing demonstrates a plausible injury-in-fact.[58] Because none of the individuals in this proceeding claims to live on or immediately adjacent to Powertech's

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[55] *See Consumers Energy Co.* (Big Rock Point Independent Spent Fuel Storage Installation), CLI-07-19, 65 NRC 423, 426 (2007); *International Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-98-6, 47 NRC 116, 117 n.1 (1998).

[56] The Petition briefly mentions that fish in the region have tested positive for uranium and that other big game might be affected by water contamination from the mine. Petition at 5-6, 18-19. The Petition also states that the area surrounding the mine contains substantial cultural resources. *Id.* at 6. Consolidated Petitioners are not clear whether they intended to base standing on these claims in addition to the claims of water contamination. If so, Consolidated Petitioners fail to establish how they will suffer a direct injury from the fish and wild game, or how the presence of cultural resources will be affected by mining operations. As such, we focus our standing determination on possible ground and surface water contamination as a result of the Dewey-Burdock facility.

[57] *Nuclear Fuel Services, Inc.* (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004) (citing *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-00-5, 51 NRC 90, 98 (2000)).

[58] *HRI*, LBP-98-9, 47 NRC at 275.

proposed mining site, the Board must determine whether the individual Petitioners have presented sufficient evidence to establish that a plausible pathway exists through which contaminants could migrate from the proposed mining site to the Petitioners' water sources.[59] In addition, because Consolidated Petitioners live in different locations, take water from different sources, and make different uses of the water, we must look to each Consolidated Petitioner individually to determine whether or not a plausible pathway has been demonstrated.

(1) SUSAN HENDERSON

Ms. Henderson lives in Edgemont, South Dakota, within 20 miles of the proposed Powertech operation.[60] She states in her affidavit that she uses "well water from the Lakota Sandstone [part of Inyan Kara] aquifer for my residence and cattle operation."[61] Ms. Henderson's affidavit further indicates she owns an 8160-acre ranch upon which she operates a substantial cattle business.[62] Neither the Applicant nor the Staff contests that Ms. Henderson uses well water from the Lakota Sandstone, which is a formation in the Inyan Kara, nor do they dispute that this is the same aquifer in which Powertech's ISL mining will occur. Because of the proximity of Ms. Henderson's property to the proposed Powertech operation and her use of well water from the Inyan Kara aquifer and because she lives within 20 miles of the Powertech operation,[63] we conclude that there is a sufficiently plausible hydrologic connection between Ms. Henderson and the Powertech operation to accord her standing. Any potential harm associated with her use of water from the Inyan Kara is fairly traceable to the proposed action.[64]

(2) DAYTON HYDE

Mr. Hyde resides at the Black Hills Wild Horse Sanctuary in Hot Springs, South Dakota, some 16 miles from Powertech's proposed mining operation. The Black Hills Wild Horse Sanctuary consists of several thousand acres of privately owned land as well as another large acreage leased from the Oglala Sioux Tribe. Mr. Hyde represents that he has lived on the Sanctuary property for 22 years and uses water for personal, household, irrigation, ranching, and gardening purposes. The Sanctuary land is protected by a Conservation easement (in favor of The Nature Conservancy), which forbids environmentally harmful activities on the land. The Cheyenne River flows through the Sanctuary and is the primary water source for

[59] *See Crow Butte II*, CLI-09-9, 69 NRC at 345.
[60] Tr. at 387.
[61] Affidavit of Susan Henderson ¶ 4 (Mar. 5, 2010).
[62] *Id.*
[63] Tr. at 387.
[64] *Sequoyah Fuels*, CLI-94-12, 40 NRC at 75.

the wild horses, domestic horses, cattle, and wildlife on the Sanctuary's land. The Sanctuary's 11,000 acres are also watered by five wells in the Inyan Kara aquifer. Mr. Hyde fears that if the water becomes contaminated, the Sanctuary will have no way of watering the horses. The Sanctuary land is downstream from Beaver Creek and Pass Creek; therefore, it could be subject to contamination in the event of any spills, leaks, or excursions. Mr. Hyde states that his water comes from wells in the Inyan Kara aquifer, and that the Cheyenne River is the primary source of water for the horses and wildlife on his land.[65] Because Mr. Hyde' s property is 16 miles downstream from the Applicant's operation[66] and he draws water from wells in the Inyan Kara aquifer, the Board finds Mr. Hyde has demonstrated standing in this proceeding.

(3) DAVID FRANKEL

Mr. Frankel lives in Buffalo Gap, South Dakota, and represents that he uses water from the Inyan Kara aquifer for gardening and irrigation, and tap water from the Madison aquifer for domestic purposes.[67] Mr. Frankel's residence is approximately 50-60 miles to the east of the proposed Dewey-Burdock site,[68] which is three times farther away than either Ms. Henderson or Mr. Hyde. Petitioners Dayton Hyde and Susan Henderson, whose livelihood is dependent upon the land, have shown that they might suffer economic harm as a result of contamination of the aquifer. Because of Mr. Frankel's relative distance from the project and the resultant less potential for harm, his standing claim is somewhat more tenuous. Nonetheless, because he uses water from the Inyan Kara,[69] Mr. Frankel has set forth a scenario by which he would suffer a direct harm and has articulated a plausible connection between his well and the Applicant's proposal. Accordingly, we find that Mr. Frankel has demonstrated his standing.

(4) GARY HECKENLAIBLE, LILIAS C. JONES JARDING, AND THEODORE P. EBERT

Mr. Gary Heckenlaible, Dr. Lilias C. Jones Jarding, and Mr. Theodore P. Ebert all seek standing based on their use and consumption of drinking water from municipal water sources. Mr. Ebert lives in Hot Springs, South Dakota. According to the Petition, Mr. Ebert uses Hot Springs tap water that comes from the Madison aquifer for personal, household, and domestic purposes, including gardening, bathing, and drinking.[70] However, in his affidavit, Mr. Ebert states that,

[65] Affidavit of Dayton Hyde ¶ 8 (Feb. 26, 2010); Petition at 26.
[66] Tr. at 388.
[67] Affidavit of David Frankel ¶ 3 (Mar. 8, 2010); Petition at 24.
[68] Tr. at 61.
[69] Tr. at 62-63.
[70] Petition at 23.

to his knowledge, his water comes from the Oglala aquifer.[71] The record indicates that Hot Springs is 29-40 miles northeast of the proposed Dewey-Burdock site.[72]

Mr. Heckenlaible lives in Rapid City, South Dakota, and uses Rapid City tap water, which comes from the Madison aquifer, for personal, household, and domestic purposes, including gardening, bathing, and drinking.[73] Consolidated Petitioners acknowledge that the distance from the proposed Dewey-Burdock site to Mr. Heckenlaible's property is "pretty far," approximately 70-80 miles.[74]

Dr. Jarding also uses Rapid City tap water, which comes from the Madison aquifer, for personal, household, and domestic uses, including gardening, bathing, and drinking. According to the Petition, "Ms. Jarding is concerned that Applicant will consume 2,243 million gallons of water from the Madison Aquifer which represents a substantial withdrawal from the aquifer upon which she relies. She also notes that her water also comes from the Mennelusa [sic] which is hydrologically connected to the Madison. Ms. Jarding is concerned that a drawdown on the Madison would also lead to a drawdown on the Minnelusa."[75] As noted above in reference to Mr. Heckenlaible, the Consolidated Petitioners acknowledge that the distance from the proposed Dewey-Burdock site to Dr. Jarding's property is "pretty far," approximately 70-80 miles.[76]

As to the demonstration of a plausible chain of connection between mining operations at the Dewey-Burdock site and the source of their drinking water, Petitioners Ebert (in Hot Springs), Heckenlaible, and Jarding (both in Rapid City) fall short of the necessary demonstration to establish their standing. The source of their drinking water is the Madison and/or Minnelusa aquifers, both of which are located more than 2000 feet below the Inyan Kara uranium source aquifer[77] and separated from the Inyan Kara aquifer by several different geologic layers including a confining shale layer of the Morrison Formation.[78] More importantly, their locations are upgradient of the proposed mining area.[79] There is considerable information in the record that the groundwater flow of the aquifers in the Southwestern Black Hills region is toward the southwest.[80] There was a

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[71] Affidavit of Theodore Ebert ¶3 (Mar. 5, 2010).

[72] Tr. at 104.

[73] Petition at 24.

[74] Tr. at 65.

[75] Petition at 26-27.

[76] Tr. at 65.

[77] Environmental Report at 3-8, Figure 3.3-2 (ADAMS Accession No. ML092870360), Plate 3.3-5 (ADAMS Accession No. ML092870386).

[78] *Id.*

[79] Staff Answer to Petition at 8, 9.

[80] *Id. See also* Technical Report at 2-10 (ADAMS Accession No. ML092870298), 2-160 to 2-161 (ADAMS Accession No. ML092870295); Tr. at 40.

discussion at the prehearing conference of the possibility of some easterly flow in the southern part of the Black Hills area,[81] but there is no indication that any of the groundwater flow in the Inyan Kara, the Minnelusa, or the Madison aquifers would flow in a north or northeast direction toward Rapid City or even northeast toward Hot Springs. Because Petitioners Ebert, Heckenlaible, and Jarding all use groundwater considerably upgradient of the mining area and fail to explain how contaminated material from the Dewey-Burdock site might plausibly enter their drinking water, they fail to demonstrate they fulfill the causation element necessary to establish their standing.

In sum, we find that three of the Consolidated Petitioners — Ms. Henderson, Mr. Hyde, and Mr. Frankel — have alleged a plausible connection between the source of their water (the Inyan Kara) and the proposed Powertech operation sufficient to establish the possibility that they could be harmed by Powertech's mining operations. Though we acknowledge that the possibility of their groundwater being harmed by the ISL mining might be remote or tenuous, we cannot conclude at this early stage of the proceeding that there is no reasonable possibility that such harm could occur.[82] A Board's standing analysis must "avoid 'the familiar trap of confusing the standing determination with the assessment of a petitioner's case on the merits.'"[83] Petitioners are not required to demonstrate their asserted injury with certainty at this stage, nor to "provide extensive technical studies" in support of their standing argument.[84] Such determinations are reserved for adjudication of the merits. A determination that "the injury is fairly traceable to the [challenged] action . . . [does] not depend[ ] on whether the cause of the injury flows directly from the challenged action, but *whether the chain of causation is plausible*."[85]

Conversely, the Board finds that Petitioners Heckenlaible, Jarding, and Ebert, who base their standing claims on use of municipal tap water in Rapid City, South Dakota (or in the case of Mr. Ebert, Hot Springs, South Dakota), have not alleged a plausible pathway by which they could be harmed. Dr. Jarding and Mr. Heckenlaible live in excess of 70 miles from the project site, and none of these three Petitioners have shown a plausible pathway connecting the proposed Powertech operations in the Inyan Kara to the sources of their water, which are

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[81] Tr. at 62-63, 70-71, 74.

[82] *Crow Butte Resources, Inc.* (*Crow Butte I*) (North Trend Expansion Project), LBP-08-6, 67 NRC 241, 280 (2008). *See also Sequoyah Fuels*, CLI-94-12, 40 NRC at 74 ("[W]e conclude that [petitioner] is not required to go further at this threshold stage to establish injury in fact.").

[83] *HRI*, LBP-98-9, 47 NRC at 272 (citing *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-5, 39 NRC 54 (1994)).

[84] *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 31 (1999) (citing *Sequoyah Fuels*, CLI-94-12, 40 NRC at 72).

[85] *Sequoyah Fuels*, CLI-94-12, 40 NRC at 75 (emphasis added). *See also id.* at 74 ("It is enough that [petitioner] has demonstrated a realistic threat . . . of sustaining a direct injury as a result of contaminated groundwater flowing from the [site] to his property.").

the Madison and/or Minnelusa aquifers. The Madison and Minnelusa aquifers are too distant and their connection to the Inyan Kara is far too uncertain to establish the plausible pathway necessary to achieve standing in this proceeding.

For the reasons set forth above, we find that only Consolidated Petitioners Susan Henderson, David Frankel, and Dayton Hyde have demonstrated standing to intervene in this proceeding.

b. Clean Water Alliance (CWA) and Aligning for Responsible Mining (ARM)

The organizational entities among the Consolidated Petitioners are Aligning for Responsible Mining (ARM) and the Clean Water Alliance (CWA).[86] As previously noted, when an organization requests a hearing, the organization may seek to establish standing either on its own behalf or on behalf of one or more of its members.[87] At oral argument, counsel for ARM stated that it seeks only representational standing in this proceeding.[88] We find that neither the CWA nor ARM has demonstrated organizational standing in this proceeding. However, both CWA and ARM have met the standard for representational standing.

As discussed at length *supra*, an organization must, in order to obtain standing, demonstrate an effect upon its organizational interests or show "that at least one of its members would suffer injury as a result of the challenged action, sufficient to confer upon it . . . 'representational' standing."[89] At oral argument, counsel for CWA stated that the organization sought both organizational and representational standing in this proceeding.[90] In the Petition and supporting affidavits, CWA does not allege a discrete injury to its organizational interests as is required by *Sierra Club v. Morton*.[91] CWA states only a generalized interest in protecting "the natural resources of the Black Hills of South Dakota with a focus on groundwater contamination from uranium mining."[92] That being so, we cannot find that CWA has established that, as an organization, it is suffering, or will suffer, from a specific, concrete harm caused by Powertech's mining operations.

Regarding the adequacy of the CWA and ARM showings to establish representational standing, as we noted earlier, an organization seeking to establish representational standing must show that at least one of its members may be

[86] Petition at 27.

[87] *Entergy Nuclear Operations, Inc.* (Big Rock Point Plant), CLI-08-19, 68 NRC 251, 258-59, 266 (2008).

[88] Tr. at 103.

[89] *HRI*, LBP-98-9, 47 NRC at 271 (internal citations omitted).

[90] Tr. at 99.

[91] 405 U.S. at 727.

[92] Petition at 27.

affected by the proceeding.[93] The organization must identify that member, and it must show that the member has authorized the organization to represent him or her and request a hearing on his or her behalf.[94] In this proceeding, as the Board has found, Mr. Frankel has established standing. Mr. Frankel has also authorized ARM to represent his interests in this proceeding.[95] Thus, ARM may participate in a representational standing capacity. Similarly, the Board has granted standing to Ms. Henderson and she has authorized CWA to represent her in this proceeding;[96] thus, CWA may participate because it has representational standing.[97]

We note, however, that an individual petitioner may not request to intervene in his or her own right while simultaneously authorizing other petitioners to represent his or her interests in the proceeding. The Commission has stated that such multiple representation might lead to confusion as to whether the individual or the organization was speaking for the petitioner.[98] Therefore, the Board directs Mr. Frankel and Ms. Henderson to elect whether they wish to proceed as individual parties to this proceeding or to have their interests represented by ARM and/or CWA. Such election must be made within ten (10) days of the issuance of this Order and served on all parties and the Board.

2. The Oglala Sioux Tribe

The Oglala Sioux Tribe is a federally recognized Indian tribe[99] and may therefore seek to participate in this proceeding as provided in 10 C.F.R. § 2.309(d)(2). However, because the proposed Powertech facility will not be located within the Tribe's boundaries, the Tribe must meet the standing requirements imposed by 10 C.F.R. § 2.309(d)(1) by showing "a concrete and particularized injury that

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[93] *Consumers Energy Co.* (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 408-09 (2007); *Vermont Yankee*, CLI-00-20, 52 NRC at 163.

[94] *Palisades*, CLI-07-18, 65 NRC at 409; *Vermont Yankee*, CLI-00-20, 52 NRC at 163.

[95] Affidavit of David Frankel, Legal Director of Aligning for Responsible Mining ¶ 2 (Mar. 8, 2010).

[96] Affidavit of Susan Henderson ¶ 2 (Mar. 5, 2010).

[97] Although the Board has not granted personal standing to Mr. Ebert, Dr. Jones Jarding, and Mr. Heckenliable, we note that they are members of ARM or CWA and therefore their interests will be represented by these entities at the hearing to be held in this proceeding.

[98] *Big Rock*, CLI-07-19, 65 NRC at 426 (citing *Northern States Power Co.* (Pathfinder Atomic Plant), LBP-89-30, 30 NRC 311, 316 (1989) ("[A petitioner] can have her interest protected by participating as an individual or by having [an organization] represent her interest. It would be detrimental to the process to have a person appear in the proceeding individually and to be represented by an organization. . . .")).

[99] Indian Entities Recognized and Eligible to Receive Services from the United States Bureau of Indian Affairs, 73 Fed. Reg. 18,553, 18,555 (Apr. 4, 2008).

is . . . fairly traceable to the challenged action and [is] likely to be redressed by a favorable decision."[100]

The Tribe's central standing claim is its interest in protecting cultural and historical resources that have been or might be found on the Powertech site, which the Tribe claims is within the aboriginal territory of the Oglala Sioux Tribe under the 1868 Fort Laramie Treaty.[101] The Commission found in *Crow Butte II* that the Oglala Sioux Tribe has "a current, concrete interest in protecting the artifacts on the site"[102] and accordingly had standing to intervene. The Tribe makes the same claims in the present proceeding and supports its claims with affidavits from Wilmer Mesteth,[103] the Oglala Sioux Tribal Historic Preservation Officer, and Denise Mesteth,[104] Director of the Oglala Sioux Tribal Land Office. The Tribe also claims a procedural interest under section 106 of the NHPA[105] in "identifying, evaluating, and establishing protections for historic and cultural resources."[106] The Tribe additionally bases its claim of standing on possible groundwater contamination from the proposed Dewey-Burdock project.[107]

Powertech opposes the Tribe's claims of standing on the ground that there is not a plausible pathway "through which contaminants from the proposed Dewey-Burdock ISL site potentially could reach areas where [the Tribe] could suffer some concrete, particularized injury-in-fact."[108] Further, Powertech claims that the Tribe has failed to demonstrate a concrete injury-in-fact with regard to the cultural and historic resources found or yet to be identified on the Dewey-Burdock site.[109] Based on the Commission's ruling in *Crow Butte II*, *supra*, the NRC Staff does not oppose the Tribe's standing "to the extent it is based on potential harm to cultural artifacts that may yet be found at the Dewey-Burdock site."[110]

The preservation of Native American cultural traditions is a protected interest under federal law.[111] If this interest is endangered or harmed, it qualifies as a

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[100] *See, e.g.*, *Yankee Atomic*, CLI-98-21, 48 NRC at 195; *Georgia Tech*, CLI-95-12, 42 NRC at 115; *Perry*, CLI-93-21, 38 NRC at 92 (citing *Lujan*, 504 U.S. at 561).

[101] Tribe Petition at 8-9.

[102] CLI-09-9, 69 NRC at 338.

[103] *See* Affidavit of Wilmer Mesteth (Apr. 1, 2010).

[104] *See* Affidavit of Denise Mesteth (Apr. 1, 2010).

[105] 16 U.S.C. § 470f.

[106] Tribe Petition at 9.

[107] *Id.* at 11.

[108] Powertech Answer to Tribe at 28.

[109] *Id.* at 29.

[110] Staff Answer to Tribe at 12.

[111] *See Havasupai Tribe v. United States*, 752 F. Supp. 1471 (D. Ariz. 1990); *United States ex rel. Chunie v. Ringrose*, 788 F.2d 638 (9th Cir. 1986); *United States v. Pend Oreille County Public Utility District No. 1*, 585 F. Supp. 606 (D. Wash. 1984); *Ute Indians v. United States*, 28 Fed.

(Continued)

cognizable injury for AEA standing purposes under *Crow Butte II*.[112] In the case before us, the Powertech mining site is within the boundaries of the 1868 Fort Laramie Treaty and was occupied by the Lakota people. Moreover, the Tribe ascribes cultural and religious significance to this land and represents that it is likely that artifacts are to be found there.[113] In fact, Powertech has identified a small number of sites in the mining area that it states are eligible for inclusion in the National Register of Historic Places and many more sites that remain unevaluated.[114]

In the NHPA, Congress declared that this Nation's historical heritage "is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans."[115] Section 106 of the Act, *inter alia*, requires a federal agency, prior to the issuance of any license, to "take into account" the effect of the federal action on any area eligible for inclusion in the National Register of Historic Places.[116]

Detailed regulations, developed to give substance to the requirements of section 106, provide a complex consultative process that federal agencies must follow to comply with the NHPA.[117] As part of this process, a tribe may become a consulting party if its property, potentially affected by a federal undertaking, has religious or cultural significance.[118] A consulting tribe is entitled to a reasonable opportunity to identify its concerns about historic properties, to advise on the identification and evaluation of historic properties (including those of traditional religious and cultural importance), to articulate its views on the undertaking's effects on such

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Cl. 768 (1993). *See also* Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. §§ 3001-13 (1990) (providing notification and inventory procedures so that Indian cultural objects and burial remains found on federal lands will be repatriated to the appropriate Tribe); National Historic Preservation Act (NHPA), 16 U.S.C. § 470 to 470x-6 (providing notification and consultation procedures federal agencies must follow prior to a federal "undertaking" to consider the undertaking's effect on historic properties); Archaeological Resources Protection Act (ARPA), 16 U.S.C. § 470aa-470mm (providing criteria and procedures pursuant to which a federal land manager may issue excavation permits for federal lands; and providing for notification to Indian Tribe if permits may result in harm to cultural or religious sites).

[112] *But see Crow Creek Sioux Tribe v. Brownlee*, 331 F.3d 912, 916 (D.C. Cir. 2003) ("Tribe does not have standing merely because it has statutory rights in burial remains and cultural artifacts. Rather, to establish standing, the Tribe must show . . . some actual or imminent injury.").

[113] Tribe Petition at 9.

[114] *Id.*

[115] 16 U.S.C. § 470(b)(4).

[116] *Id.* § 470f; *see also id.* § 470a(a) (National Register Guidelines).

[117] 36 C.F.R. Part 800; *see* Advisory Council on Historic Preservation, 65 Fed. Reg. 77,698 (Dec. 12, 2000).

[118] *See* 36 C.F.R. § 800.2(c)(2)(ii).

properties, and to participate in the resolution of adverse effects.[119] Moreover, the regulations under NHPA provide that the federal agency "should be sensitive to the special concerns of Indian tribes in historic preservation issues, which often extend beyond Indian lands to other historic properties," and should "invite the governing body of the responsible tribe to be a consulting party and to concur in any agreement."[120]

In short, section 106 of the NHPA provides the Tribe with a procedural right to protect its interests in cultural resources. The Supreme Court has held that a party claiming violations of this procedural right is to be accorded a special status when it comes to standing: "The person who has been accorded a procedural right to protect his concrete interests can assert that right without meeting all the normal standards for redressability and immediacy."[121] To establish an injury-in-fact, a party merely has to show "some threatened concrete interest personal" to the party that NHPA was designed to protect.[122] Here, the Tribe's concrete interest is clear: there are cultural resources on the Powertech site that have not been properly identified and may be harmed as a result of mining activities. Without consultation with the Tribe, culturally significant resources will go unidentified and unprotected. As a result, development or use of the land might cause damage to these cultural resources, thereby injuring the protected interests of the Tribe.

Federal law not only recognizes that Native American tribes have a protected interest in cultural resources found on their aboriginal land, but as well has imposed on federal agencies a consultation requirement under the NHPA to ensure the protection of tribal interests in cultural resources. The Tribe's threatened injury is therefore within the zone of interests protected by the NHPA. The Tribe thus is accorded standing here.[123]

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[119] *See id.* § 800.2(c)(2)(ii)(A).

[120] *See id.* § 800.1(c)(2)(iii).

[121] *Lujan*, 504 U.S. at 572 n.7.

[122] *Nulankeyutmonen Nkihtaqmikon v. Impson*, 503 F.3d 18 (1st Cir. 2007) (citing *Lujan*, 504 U.S. at 572-73 nn.7-8).

[123] The cases that have addressed procedural violations of the NHPA have uniformly granted standing to tribes under this relaxed standard and have proceeded directly to the merits of the NHPA claim. *See, e.g.*, *Naragansett Indian Tribe v. Warwick Sewer Authority*, 334 F.3d 161 (1st Cir. 2003); *Muckleshoot Indian Tribe v. United States Forest Service*, 177 F.3d 800 (9th Cir. 1999); *Snoqualmie Indian Tribe v. Federal Energy Regulatory Commission*, 45 F.3d 1207 (9th Cir. 2008). *See also Duncan's Point Lot Owners Ass'n, Inc. v. Federal Energy Regulatory Commission*, 522 F.3d 371 (D.D.C. 2008).

V. CONTENTIONS PROPOSED BY CONSOLIDATED PETITIONERS AND THE OGLALA SIOUX TRIBE

A. Standards for Admissibility of Contentions

In order to participate as a party in a proceeding before the Board, a petitioner must not only establish standing, but must also proffer at least one admissible contention that meets the requirements of 10 C.F.R. § 2.309(f)(1).[124] An admissible contention must: (i) provide a specific statement of the legal or factual issue sought to be raised; (ii) provide a brief explanation of the basis for the contention; (iii) demonstrate that the issue raised is within the scope of the proceeding; (iv) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (v) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing; and (vi) provide sufficient information to show that a genuine dispute exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or, in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief.[125]

The purpose of these section 2.309(f)(1) requirements is to "focus litigation on concrete issues and result in a clearer and more focused record for decision."[126] The Commission has stated that "the hearing process [is intended only for] issues that are 'appropriate for, and susceptible to, resolution in an NRC hearing.'"[127] Furthermore, "[w]hile a board may view a petitioner's supporting information in a light favorable to the petitioner . . . the petitioner (not the board) [is required] to supply all of the required elements for a valid intervention petition."[128] The rules on contention admissibility are "strict by design."[129] Further, absent a waiver, contentions challenging applicable statutory requirements or Commission

[124] *See* 10 C.F.R. § 2.309(a).

[125] *Id.* § 2.309(f)(1).

[126] Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

[127] *Id.*

[128] *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009).

[129] *See, e.g., Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 213 (2003); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358-59 (2001); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334-35 (1999).

regulations are not admissible in agency adjudications.[130] Failure to comply with any of these requirements is grounds for not admitting a contention.[131]

Several of the contentions we address below are alleged to be contentions of omission. A contention of omission claims that "the application fails to contain information on a relevant matter as required by law . . . and [provides] the supporting reasons for the petitioner's belief."[132] To satisfy section 2.309(f)(1)(i)-(ii), the contention of omission must describe the information that should have been included in the ER and provide the legal basis that requires the omitted information to be included. The petitioner must also demonstrate that the contention is within the scope of the proceeding.[133]

Section 2.309(f)(1)(v) requires the petitioner to provide a concise statement of the alleged facts that support its position and upon which the petitioner intends to rely at the hearing. However, "the pleading requirements of 10 C.F.R. § 2.309(f)(1)(v), calling for a recitation of facts or expert opinion supporting the issue raised, are inapplicable to a contention of omission beyond identifying the legally required missing information."[134] Thus, for a contention of omission, the petitioner's burden is only to show the facts necessary to establish that the application omits information that should have been included. The facts relied on need not show that the facility cannot be safely operated, but only that the application is incomplete. If an applicant cures the omission, the contention will become moot.[135]

Finally, if the contention makes a *prima facie* allegation that the application omits information required by law, "it necessarily presents a genuine dispute with the Applicant on a material issue in compliance with 10 C.F.R. § 2.309(f)(1)(vi) [and] . . . raises an issue plainly material to an essential finding of regulatory compliance needed for license issuance"[136] in accordance with section 2.309(f)(1)(iv).

B. Board Rulings on Consolidated Petitioners' Proposed Contentions

1. Consolidated Petitioners' Contentions A and B

Consolidated Petitioners state in Contention A:

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[130] 10 C.F.R. § 2.335(a).

[131] *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).

[132] 10 C.F.R. § 2.309(f)(1)(vi).

[133] *Id.* § 2.309(f)(1)(iii).

[134] *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294, 317 (2008) (quoting *Pa'ina Hawaii, LLC,* LBP-06-12, 63 NRC 403, 414 (2006)).

[135] *North Anna,* LBP-08-15, 68 NRC at 317; *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 383 (2002).

[136] *Pa'ina,* LBP-06-12, 63 NRC at 414.

> The Application does not accurately describe the environment affected by its proposed mining operations or the extent of its impact on the environment as a result of its use and potential contamination of water resources, through mixing of contaminated groundwater in the mined aquifer with water in surrounding aquifers and drainage of contaminated water into the Cheyenne River.[137]

Consolidated Petitioners provide no further explanation or information supporting this contention in their Petition or their Reply. A petitioner, especially one represented by counsel, bears the burden of going forward and specifically addressing each of the six elements in 10 C.F.R. § 2.309(f)(1) for each contention proffered.[138] A single sentence labeled a contention, with no reference to the six elements of section 2.309(f)(1) does not an admissible contention make.

Both Powertech and the NRC Staff oppose admission of Contention A. Powertech argues that Consolidated Petitioners fail to point to any specific portions of the Application that they claim are inaccurate and fail to provide support for their claim that water resources will be affected.[139] Thus, Powertech argues that Contention A should be denied because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The NRC Staff also asserts that Contention A fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). NRC Staff argues that Consolidated Petitioners fail to identify the portion or portions of Powertech's Application that are deficient, and fail to support their claims that contaminated groundwater could infiltrate surface water with facts or expert opinion.[140]

Consolidated Petitioners state in Contention B:

> Applicant's proposed mining operations will use and contaminate water resources, resulting in harm to public health and safety, through mixing of contaminated groundwater in the mined aquifer with water in surrounding aquifers and drainage of contaminated water into the Cheyenne River.[141]

Consolidated Petitioners provide no further explanation or information supporting this contention in their Petition or their Reply.

Both Powertech and the NRC Staff oppose admission of Contention B. Powertech argues that, like Contention A, Consolidated Petitioners fail to identify the portion or portions of Powertech's Application that are inaccurate or deficient,

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[137] Petition at 34.

[138] *See supra* Section V.A.

[139] Powertech Answer to Petition at 47.

[140] Staff Answer to Petition at 19.

[141] Petition at 34.

in contravention of 10 C.F.R. § 2.309(f)(1)(vi).[142] Furthermore, Powertech states that Consolidated Petitioners fail to identify the specific water resources that may be affected by intermixing and the means by which contaminants may be introduced into the Cheyenne River.[143] Powertech argues that because Consolidated Petitioners do not plead Contention B with the requisite specificity, and because they provide no facts or expert opinion to support their claims,[144] Contention B is inadmissible.

The NRC Staff argues that Contention B should be denied because Consolidated Petitioners fail to provide facts or expert opinions to explain which hydrologic mechanisms could result in groundwater contamination and how this contamination could possibly occur.[145] The Staff also claims that Consolidated Petitioners do not demonstrate a genuine dispute with Powertech's Application.[146] Because Consolidated Petitioners have not met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), the Staff argues that Contention B is inadmissible.

Contentions A and B are exactly the same as Environmental Contentions A and B proffered by Consolidated Petitioners in the *Crow Butte* License Renewal proceeding (*Crow Butte II*).[147] In the *Crow Butte* License Amendment proceeding (*Crow Butte I*), Consolidated Petitioners submitted similar contentions, and these contentions were reformulated by the Board in that case. Consolidated Petitioners have used the contentions, as reworded by the Board in *Crow Butte I*, in *Crow Butte II*, and in the present proceeding. We note that, although the Board in *Crow Butte I* admitted Contentions A and B as reformulated,[148] the Commission found that the Board abused its discretion, overturned the Board's decision, and rejected Contentions A and B as reformulated.[149]

In *Crow Butte II*, Consolidated Petitioners proffered the exact same contentions as reformulated by the Board in *Crow Butte I*, but failed to provide the extensive support, allegations, and arguments provided in their *Crow Butte I* pleading, opting instead to incorporate their arguments in *Crow Butte I* into their *Crow Butte II* pleading.[150] The Board in *Crow Butte II* found the practice of "incorporating by reference" contrary to Commission case law and subsequently denied both

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[142] Powertech Answer to Petition at 48.

[143] *Id.*

[144] 10 C.F.R. § 2.309(f)(1)(v).

[145] Staff Answer to Petition at 21.

[146] *Id.*

[147] *Crow Butte Resources, Inc.* (*Crow Butte II*) (In Situ Leach Facility, Crawford, Nebraska), LBP-08-24, 68 NRC 691, 729 (2008).

[148] LBP-08-6, 67 NRC at 318-23.

[149] *Crow Butte I*, CLI-09-12, 69 NRC 535, 573 (2009).

[150] LBP-08-24, 68 NRC at 730.

Contention A and Contention B based on the dearth of information given in that proceeding.[151]

In this proceeding, as in *Crow Butte II*, Consolidated Petitioners fail to provide the extensive support for Contentions A and B that was provided, and found to be admissible, by the Board in *Crow Butte I*. At oral argument, counsel for Consolidated Petitioners urged the Board to find support for Contentions A and B elsewhere in the Petition, namely in the introductory material.[152] Commission case law supports the conclusion that it is not the Board's duty to forage through a petition in order to find statements or other support that may be located in various portions of the petition but not referenced in the contention.[153] A properly pled contention needs to lay out explicitly the required criteria of 10 C.F.R. § 2.309(f)(1)(i)-(vi) in order to be admissible;[154] a licensing board cannot be expected to go on a veritable scavenger hunt to find the missing pieces needed for an admissible contention. Indeed, the 2004 changes to NRC regulations require potential intervenors to plead contentions with specificity, as opposed to the then-current practice of merely describing "areas of concern," in order to ensure that the licensing board is not "burdened with the need to sift through the record to identify the basic issues and pertinent evidence necessary for a decision."[155] If this Board were to comply with Consolidated Petitioners' request that we scour the entirety of the submitted information in order to piece together an admissible contention for them, the Board would be acting in contravention of the spirit of the regulations and Commission precedent. We decline to do that here.

As it stands in this proceeding, the Board finds itself presented with two contentions that, as pled, do not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). We agree with the Board in *Crow Butte II* that Contentions A and B do not contain sufficient explanation of the basis or bases for these contentions, do not provide alleged facts or expert opinions to support Consolidated Petitioners' position, and fail to raise a genuine dispute with

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[151] *Id.*

[152] Tr. at 288-96.

[153] *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 240-41 (1989) ("The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point. The Commission cannot be faulted for not having searched for a needle that may be in a haystack."). *See also Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-93-21, 38 NRC 143, 146 (1993) ("[I]t is a settled rule of practice at this Commission that contentions ought to be interpreted in light of the required specificity, so that adjudicators and parties need not search out broader meanings than were clearly intended"); *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 89 & n.26 (2004).

[154] 69 Fed. Reg. at 2221.

[155] *Id.* at 2202.

Powertech's Application. Accordingly, the Board concludes that Contention A and Contention B are inadmissible.

2. Consolidated Petitioners' Contention C

Consolidated Petitioners state in Contention C:

> Cost Benefits as discussed in the Application fail to include economic value of environmental benefits.[156]

Consolidated Petitioners read 10 C.F.R. § 51.45(c)[157] to require that Powertech's Application include a discussion of the economic value of the water to be taken from the Inyan Kara and Madison Aquifers and how the resulting "aquifer drawdown" will affect property values in the area.[158] Consolidated Petitioners assert that NRC regulations require a discussion of the economic value of environmental benefits be provided in the Application, and that Powertech's failure to include such a discussion renders the Application deficient.[159]

Both Powertech and the NRC Staff oppose admission of Contention C. Powertech claims that Contention C is inadmissible because it fails to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).[160] First, Powertech argues that its Application does include an assessment of the potential impacts of the Dewey-Burdock facility on wetlands, which Consolidated Petitioners do not dispute.[161] Second, Powertech asserts that 10 C.F.R. Part 51 does not require that it "quantify the positive economic value of environmental benefits; but rather, it requires a 'hard look' at potential positive and negative impacts of a proposal."[162] Therefore, Powertech claims that it has not omitted requisite information from its Application. Finally, Powertech takes issue with one study Consolidated Petitioners cite to support Contention C. Powertech argues that the study, which references wetlands in Australia, is irrelevant to this proceeding and that Consolidated Petitioners fail to draw a correlation between the other studies

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[156] Petition at 35.

[157] Section 51.45(c) discusses the general requirements of environmental reports. Specifically it states, *inter alia*, "The environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects."

[158] *Id.*

[159] *Id.*

[160] Powertech Answer to Petition at 48-50.

[161] *Id.* at 49.

[162] *Id.* (citations omitted).

they cited and the possible impacts that the proposed Dewey-Burdock facility might have on wetlands in the area.[163]

The NRC Staff supports Powertech's assertion that a discussion of water consumption is included in Powertech's Application and that Consolidated Petitioners fail to dispute the Application's analyses.[164] The NRC Staff further states that Consolidated Petitioners have failed to provide support for their claim that the Dewey-Burdock project will cause negative impacts to water resources and that Consolidated Petitioners fail to dispute the analyses of impacts to water resources that are included in Powertech's Application.[165] Therefore, the NRC Staff opposes the admission of Contention C because it fails to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

We determine that Contention C is inadmissible because Consolidated Petitioners have failed to provide the Board with sufficient information to support a contention that the drawdown of the Madison and Inyan Kara aquifers from mining operations would have a detrimental effect on Petitioners' property values or on wetlands in the area. A similar contention was filed in *Crow Butte II* and was rejected by the Commission as lacking support for the premise that ongoing mining operations will drain or contaminate wetlands, such that their economic benefits will be decreased.[166] Though counsel for Consolidated Petitioners states that the defect in the *Crow Butte II* contention has been cured here,[167] we do not agree. Consolidated Petitioners have provided no support for the assertion that drawdown in the mined aquifers will be significant enough to cause an economic injury to Petitioners. While the study cited by Consolidated Petitioners in the Petition does support the assertion that drawdown *generally* affects the economic benefits of wetlands,[168] Consolidated Petitioners have not provided support to demonstrate that a genuine dispute exists regarding the impact of water drawdown from the proposed Dewey-Burdock operation. Accordingly, Consolidated Petitioners have failed to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), and this contention must be *denied.*

3. Consolidated Petitioners' Contention D

Consolidated Petitioners state in Contention D:

Section 51.43(e) requires disclosure of adverse information. Section 40.9 requires

[163] *Id.* at 48, 50.
[164] Staff Answer to Petition at 22-23.
[165] *Id.* at 22.
[166] CLI-09-9, 69 NRC at 356.
[167] Tr. at 315.
[168] *See* Petition at 35.

> disclosure of all material facts and that the Application be complete. As described in the LaGarry Opinion and the Moran Opinion, the Application fails to disclose all required information in a comprehensible manner.[169]

Consolidated Petitioners contend that Powertech's Application violates 10 C.F.R. § 40.9 because it is disorganized and fails to relay important technical information in a comprehensible manner.[170] Consolidated Petitioners rely upon the opinion of Dr. Robert E. Moran,[171] who states that the information in the Application is presented in a confused, "technically inadequate manner" and thus lacks a "statistically-sound data set for *all* Baseline Water Quality . . . as is required in NUREG-1569" that is easy to identify and interpret.[172] Similarly, Consolidated Petitioners offer the opinion of Dr. Hannan E. LaGarry,[173] who claims that Powertech's Application violates 10 C.F.R. § 51.45 and Criterion 5B of Appendix A to Part 40 "by failing to adequately describe confinement of the host aquifer . . . to analyze properly secondary porosity in the form of faults and joints, artesian flow, and horizontal flow of water within the uranium-bearing strata."[174] In sum, Consolidated Petitioners are alleging that Powertech's Application "fails to disclose material information in a comprehensible manner."[175]

Both Powertech and the NRC Staff oppose admission of Contention D. Powertech states that Consolidated Petitioners misread 10 C.F.R. §§ 40.9 and 51.45 and therefore fail to raise a genuine dispute with the Application as required by 10 C.F.R. § 2.309(f)(1)(vi).[176] First, Powertech argues that 10 C.F.R. § 40.9 does not impose an organizational requirement on applicants, and that Consolidated Petitioners' claim that the Application is in violation of section 40.9 because it is presented in an incomprehensible manner is unfounded.[177] Secondly, Powertech asserts that Consolidated Petitioners misread section 51.45 by alleging that Powertech has omitted material information from its Application.[178] Powertech reads section 51.45 as providing "parameters for information that should be submitted in an environmental report but do[es] not prescribe any sort of 'technical ade-

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[169] *Id.* at 34-35.

[170] *Id.* at 36.

[171] Dr. Robert E. Moran is a hydrologist/geochemist who has over 38 years of domestic and international experience in conducting and managing water quality, geochemical and hydrogeologic work. Declaration of Robert E. Moran at 1.

[172] *Id.* at 36-37 (emphasis in original).

[173] Dr. Hannan E. LaGarry is a geologist who has taught at Ft. Hayes State University, University of Nebraska, Chadron State College, and Oglala Lakota College. Declaration of Hannan LaGarry at 1-2.

[174] *Id.* at 38.

[175] *Id.* at 36.

[176] Powertech Answer to Petition at 50.

[177] *Id.*

[178] *Id.* at 51.

quacy' requirement."[179] Further, Powertech asserts that Consolidated Petitioners misread Criterion 5B of Appendix A to Part 40 as pertaining to ISL facilities.[180] Powertech argues that this section applies only to conventional uranium mills, and is therefore not applicable to the Dewey-Burdock Application. However, Powertech does concede that portions of Appendix A have recently been applied to ISL facilities by the Commission as a matter of policy.[181] According to Powertech, therefore, Consolidated Petitioners have failed to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) because they do not identify an omission from the Application, as is required by law.

Like Powertech, the NRC Staff argues that 10 C.F.R. § 40.9 does not impose any requirement that applicants organize their submissions in any specific manner.[182] The Staff further argues that the Application is not in fact disorganized, and that Consolidated Petitioners fail to support their claim that it is.[183] Additionally, the Staff contends that the Application does not need to include additional information on baseline water quality, as Dr. Moran asserts in the Petition.[184] Dr. Moran claims that this requirement can be found in NUREG-1569, to which the Staff responds that NUREGs are only guidance and do not have the same force and effect as NRC regulations.[185] Furthermore, the Staff argues that Consolidated Petitioners have not provided any support or expert opinion that supports their assertion that the baseline water quality data in the Application is deficient and that additional information is required.[186] Finally, the NRC Staff disputes Consolidated Petitioners' argument that the Application violates Criterion 5B of Appendix A to Part 40 by arguing that Consolidated Petitioners have not demonstrated that the alleged omissions regarding aquifer confinement and water flow are material to the findings the NRC must make, have failed to provide alleged facts or expert opinion to support their claim, and have failed to raise a genuine dispute with Powertech's Application, all in contravention of 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi).

The Board concludes that Consolidated Petitioners' Contention D is inadmissible insofar as it challenges the organization and clarity of Powertech's Application. We do not believe that Consolidated Petitioners have shown Powertech's Application to be so incomprehensible as to be useless to the public. Furthermore, issues of disorganization in an application cannot be said to be

[179] *Id.* at 51-52.
[180] *Id.* at 52.
[181] *Id.*
[182] Staff Answer to Petition at 26.
[183] *Id.*
[184] *Id.* at 27.
[185] *Id.*
[186] *Id.* at 28.

germane to the licensing process. According to the Board in *HRI*, "[a]ny area of concern is germane if it is relevant to whether the license should be denied or conditioned."[187] The organization or format of an application was not considered by that Board to be germane because the objection to the application's organization was not an objection to the licensing action at issue in the proceeding.[188]

With regard to the portions of Contention D that challenge the technical adequacy of baseline water quality data and adequate confinement of the host aquifer, the Board determines that these portions are admissible under 10 C.F.R. § 2.309(f)(1). Consolidated Petitioners offer the expert opinion of Dr. Hannan LaGarry, who opines that conclusions regarding baseline water conditions have been biased by Powertech's technical presentation of the data in the Application.[189] Dr. LaGarry also identifies portions of the Application that deal with artesian and horizontal flow in the host aquifer, and concludes that analyses of how such flow could impact surrounding aquifers and surface waters is lacking in Powertech's Application.[190]

Consolidated Petitioners identify an issue that is within the scope of this proceeding and material to the findings the NRC must make in evaluating Powertech's Application as required by 10 C.F.R § 2.309(f)(1)(iii) and (iv). Further, Consolidated Petitioners raise a genuine dispute with Powertech's Application, namely that Powertech's presentation of baseline water quality data is biased and its analyses of aquifer confinement are inadequate. Consolidated Petitioners provide the expert opinion of Dr. LaGarry to support their assertions. Whether Consolidated Petitioners are correct in their assertions is not a matter the Board can resolve at this stage in the proceeding; such a finding is reserved for a merits determination after hearing. We therefore conclude that Consolidated Petitioners have met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) and admit the portions of Contention D that challenge the technical adequacy of baseline water quality data and adequate confinement of the host aquifer.

Contention D is therefore *admitted* as follows:[191]

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[187] LBP-98-9, 47 NRC at 280.

[188] *Id.*

[189] Petition at 37.

[190] *Id.* at 38-39.

[191] *Crow Butte I*, CLI-09-12, 69 NRC at 552-53 (citing *Shaw AREVA MOX Services* (Mixed Oxide Fuel Fabrication Facility), LBP-08-11, 67 NRC 460, 482 (2008) (emphasis omitted). *See id.* at 481-83 for a discussion of Board's legal authority to reformulate contentions. *See also AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-22, 64 NRC 229, 237, 240-44 (2006); *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 341 (2006); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 NRC 229, 245, 252 (2004); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 271, 276 (2004).

> Powertech's presentation and analysis of baseline water quality data in its Application are inadequate. Further, Powertech's analysis of aquifer confinement fails to include an analysis of how artesian and horizontal flow could impact surrounding aquifers and surface waters.

4. Consolidated Petitioners' Contentions E and J

Consolidated Petitioners state in Contention E:

> The License may not be granted because it would violate Section 40.32(d) because of lack of adequate confinement of the host Inyan Kara aquifer, the proposed operation would be inimical to public health and safety in violation of the AEA and NRC . . . .[192]

Consolidated Petitioners argue that the upper confining layers of the Inyan Kara aquifer are thin and that there are breaches in these layers due to joints, faults, and perforations made by wells.[193] According to Consolidated Petitioners, this lack of confinement can potentially enable lixiviant from mining activities to leak into drinking water supplies or into groundwater.[194] Consolidated Petitioners assert that, due to these circumstances, and the fact that little is known regarding the area's hydrology and the interconnection between aquifers, the public health and safety would be at risk should the license be issued to Powertech.[195] Consolidated Petitioners support their argument with an opinion to that effect from Dr. Hannan LaGarry.[196]

Both Powertech and the NRC Staff oppose admission of Contention E. Powertech argues that Consolidated Petitioners point to no regulation in Part 40 that requires ISL processes to be conducted in a confined geologic area.[197] Further, Powertech asserts that the Application does in fact address issues regarding confinement in the Inyan Kara aquifer in some detail in sections 3.3.2.2, 3.4.3.1.2, and 3.4.3.2.[198] In attempting to refute Consolidated Petitioners' claim that exploratory wells pose adverse public health and safety risks, Powertech argues that all wells are properly plugged within the project area.[199] Moreover, Powertech asserts that Consolidated Petitioners' claim is not based on any expert opinion

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[192] Petition at 39.
[193] *Id.* at 40.
[194] *Id.* at 39.
[195] *Id.*
[196] *Id.*
[197] Powertech Answer to Petition at 53.
[198] *Id.* at 54.
[199] *Id.*

or documentation.[200] In sum, Powertech opposes the admission of Consolidated Petitioners' Contention E because it is based on "unfounded conjecture" and fails to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The NRC Staff argues that Contention E is a reiteration of Contentions A, B, and D and is inadmissible for the same reasons.[201] First, the NRC Staff asserts that Consolidated Petitioners fail to explain why their concerns would make issuing a license to Powertech inimical to public health and safety because they do not point to any regulations, beyond 10 C.F.R. § 40.32(d), that the Application allegedly violates.[202] Secondly, the NRC Staff claims that the issues raised by Dr. LaGarry in Contention E are not material to the findings the NRC must make in this proceeding.[203] Finally, the NRC Staff argues that, as with Contention D, Consolidated Petitioners fail to dispute sections of the Application where Powertech addresses the likelihood of excursions and argue only that additional analyses are needed in the Application.[204] In sum, the NRC Staff claims that Contention E is inadmissible because it does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).

The Board determines that Consolidated Petitioners' Contention E is admissible. Consolidated Petitioners identify an issue that is within the scope of this proceeding and material to the findings the NRC must make in evaluating Powertech's Application. Further, Consolidated Petitioners raise a genuine dispute with Powertech's Application, namely that issuance of the license would pose a threat to public health and safety due to lack of aquifer confinement and possible groundwater contamination. Consolidated Petitioners provide the expert opinion of Dr. Hannan LaGarry to support their assertion that there is a lack of confinement of the host aquifer. Whether or not the Board ultimately determines that there is indeed a lack of confinement of the host aquifer is not an issue for the contention admissibility stage of the proceeding. We therefore conclude that Consolidated Petitioners have met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) and *admit* Contention E as merged with Contention J, *infra* at pp. 406-07.

Consolidated Petitioners state in Contention J:

> Section 51.45(c), (e) are violated because: the Application fails to describe the extent to which the affected area contains faults and fractures horizontally and vertically

[200] *Id.*
[201] Staff Answer to Petition at 32.
[202] *Id.* at 33.
[203] *Id.*
[204] *Id.* at 34.

between aquifers, through which the groundwater can spread thorium, radium 226 & 228, arsenic and other heavy metals disturbed through the ISL mining process.[205]

Consolidated Petitioners assert that water containing these metals can travel through faults and fractures in the aquifer to contaminate clean drinking water and water used for household purposes, thereby making ill anyone who ingests the water.[206]

Both Powertech and the NRC Staff oppose admission of Contention J. Powertech argues that Contention J should not be admitted for the same reasons as Contentions D, F, and H.[207] Again, Powertech makes the argument that 10 C.F.R. § 51.45 does not "prescribe any form or specificity requirements for the type or extent of information that should be included" in an application.[208] Furthermore, Powertech claims that the information Consolidated Petitioners allege is missing is in fact in the Application, and that Contention J therefore does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi) because it fails to raise a genuine dispute with Powertech's Application.

The NRC Staff argues that the information Consolidated Petitioners claim is omitted from Powertech's Application is indeed there, and that Consolidated Petitioners do not address these sections of the Application, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).[209] Furthermore, the NRC Staff argues that Consolidated Petitioners fail to provide any alleged facts or expert opinion to support their "blanket assertion[ ]" that harmful materials could be transported through faults into surrounding aquifers.[210] Therefore, the NRC Staff asserts that Contention J is inadmissible because it does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v).

At oral argument, counsel for Consolidated Petitioners conceded that Contention J was the same as Contention E except that Contention J expresses concern that the faults and fractures allegedly existing between aquifers can spread heavy metals, such as thorium, radium and arsenic.[211] For the same reasons the Board found Contention E to be admissible,[212] we determine that Contention J is *admissible.* To assure a more efficient proceeding,[213] we merge the two contentions,

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[205] Petition at 56.

[206] *Id.*

[207] Powertech Answer to Petition at 97.

[208] *Id.*

[209] Staff Answer to Petition at 92.

[210] *Id.* at 93.

[211] Tr. at 381-82.

[212] *See supra* at p. 405.

[213] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 33 (2010) (citing *Crow Butte I*, CLI-09-12, 69 NRC at 552).

hereinafter to be designated Consolidated Petitioners' Contention E so that it now reads:

> The lack of adequate confinement of the host Inyan Kara aquifer makes the proposed operation inimical to public health and safety in violation of Section 40.31(d). Further, Applicant's failure to describe faults and fractures between aquifers, through which the groundwater can spread uranium, thorium, radium 226 and 228, arsenic, and other heavy metals, violates Section 51.45(c) and (e).

5. Consolidated Petitioners' Contention F

Consolidated Petitioners state in Contention F:

> The Application violates Section 51.45(c), (e) and 51.45(b)(5) by failure to describe irretrievable commitment of resources in the form of water resources taken from the Inyan Kara and Madison Aquifers in the form of the "bleed" and in connection with restoration which involves 320 gpm from the Inyan Kara and up to 500 gpm from the Madison, as described in the Application and referenced in this Petition above.[214]

Consolidated Petitioners provide no further explanation or information supporting this contention in their Petition or their Reply.

Both Powertech and the NRC Staff oppose admission of Contention F. Powertech argues that, like Contention D, Consolidated Petitioners' Contention F should be denied because section 51.45 "does not prescribe the form or specificity of the information to be offered."[215] Powertech claims that a discussion concerning the commitment of water resources is included in its Application.[216] Therefore, according to Powertech, Consolidated Petitioners' claim that Powertech's discussion of commitment of resources in their Application is inadequate and cannot support an admissible contention under 10 C.F.R. § 2.309(f)(1)(vi).

The NRC Staff argues that this contention is inadmissible because it fails to account for the sections of Powertech's Application that contain the information Consolidated Petitioners claim is missing.[217] Because Consolidated Petitioners do not dispute any of the conclusions in the Application, in contravention of 10 C.F.R. § 2.309(f)(1)(vi), the Staff argues that Contention F is inadmissible.

Contention F, like Contentions A and B, is a single sentence without any additional support. Because Consolidated Petitioners' Contention F, as pled,

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[214] Petition at 40.

[215] Powertech Answer to Petition at 56.

[216] *Id.*

[217] Staff Answer to Petition at 34.

does not attempt to address or otherwise discuss the six criteria of 10 C.F.R. § 2.309(f)(1), it is *not admitted.*[218]

6. Consolidated Petitioners' Contention G

Consolidated Petitioners state in Contention G:

> The Application violates Section 51.45(c) and (e) by failing in ER Section 1.3 to explain the details involved and exposures related to Applicant's proposal to "receive and process uranium loaded resins from other Proposed Projects such as Powertech's nearby Aladdin and Dewey Terrace Proposed Satellite Facility Projects planned in Wyoming or from other licensed ISL operators or other licensed facilities generating uranium-loaded resins."[219]

Consolidated Petitioners contend that, if Powertech is to be accepting resins from other mines, the Application must provide all plans and information "for those ores and for their processing before a permit is issued."[220] Consolidated Petitioners claim that issues such as the amount of nuclear material that will be handled, the amount of water to be used, how wastes will be disposed, and the impacts of having the additional resins onsite must be discussed in the Application before a license can be issued.[221]

Both Powertech and the NRC Staff oppose admission of Contention G. Powertech claims that this contention is outside the scope of the proceeding, in contravention of 10 C.F.R. § 2.309(f)(1)(iii).[222] It argues that, though Consolidated Petitioners accurately cite statements made by Powertech concerning possible future mining and processing of resins from other sites, "they ignore the fact that this Dewey-Burdock license application is strictly limited to the recovery and processing of uranium only from the Dewey and Burdock sites."[223] Powertech categorizes its statements regarding recovery of resins from other sites as "forward-looking" and not part of the current Application.[224]

The NRC Staff argues that Consolidated Petitioners cite no alleged facts or expert opinions to support Contention G, therefore not meeting the admissibility

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[218] The issue raised by Consolidated Petitioners' Contention F is similar to the Oglala Sioux Tribe's Contention 4, which is addressed *infra* at pp. 426-28.

[219] Petition at 40.

[220] *Id.*

[221] *Id.* at 40-41.

[222] Powertech Answer to Petition at 57.

[223] *Id.* at 58.

[224] *Id.*

requirements of 10 C.F.R. § 2.309(f)(1)(v).[225] Consolidated Petitioners contend that, simply because Powertech has identified the mining and processing of resins at other sites to be a possibility, the action and the impacts must be addressed in the Application.[226] The NRC Staff asserts that this is legally incorrect, and that Consolidated Petitioners fail to provide support for their assertion that Powertech needs to include this information in the Application.[227]

The Board determines that Consolidated Petitioners' Contention G is inadmissible because it is outside the scope of the current licensing proceeding and therefore is barred by 10 C.F.R. § 2.309(f)(1)(iii). In their pleadings and at oral argument, both Powertech and the NRC Staff asserted that the current Application is for a facility at the Dewey-Burdock site only, and that they do not consider a license to receive or process uranium from other facilities to be part of the current licensing request.[228] Indeed, counsel for NRC Staff stated that if Powertech were to receive resins from other sites under a license for the current Application, it would be in violation of that license and subject to enforcement measures, and possible revocation of the license.[229] Further, both Powertech and the NRC Staff agree that if Powertech were to decide to accept resins from other sites, a license amendment would be required, which would include a public notice and the opportunity to request a hearing before a licensing board.[230]

The Board notes Consolidated Petitioners' concern that, because Powertech stated in its Application that it may process resins from outside sources at the Dewey-Burdock facility in the future, it will be permitted to do so without having to file a license amendment. Consolidated Petitioners have not, however, provided the Board with any information that would lead the Board to believe that Powertech's statement was anything more than "forward-looking." We expect that, as both Powertech and the NRC Staff have represented to the Board, the public will be provided with an opportunity for a hearing in the event that Powertech decides to accept resins from other facilities at Dewey-Burdock.

For the foregoing reasons, we conclude that Consolidated Petitioners' Contention G is *inadmissible.*

7. Consolidated Petitioners' Contention H

Consolidated Petitioners state in Contention H:

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[225] Staff Answer to Petition at 35.
[226] *Id.* at 37.
[227] *Id.*
[228] Tr. at 361, 363.
[229] Tr. at 363.
[230] Tr. at 361-62.

> Section 51.45(c) and (e) is violated because in the Application Section 3.4.3.1.7 ER on hydraulic connection of aquifers, the Applicant provides information that is not local and fails to include studies that are closer to the proposed project area.[231]

Consolidated Petitioners provide no further explanation or information supporting this contention in their Petition or their Reply.

Both Powertech and the NRC Staff oppose admission of Contention H. Powertech argues that Contention H should not be admitted for the same reasons as Contentions D and F, namely that 10 C.F.R. § 40.9 does not impose an organizational requirement on applicants and that a claim of inadequacy in the Application under 10 C.F.R. § 51.45 cannot be the basis for a contention.[232] Powertech claims that Consolidated Petitioners must allege "specific 'safety or legal reasons' requiring rejection of the Dewey-Burdock license application."[233] Further, Powertech asserts that its Application does in fact include discussions of hydraulic connections between aquifers and that Consolidated Petitioners fail to address the sections of the Application that discuss local aspects of aquifers and site hydrology.[234] Powertech insists that Contention H is therefore inadmissible.

The NRC Staff argues that Contention H is inadmissible because it fails to discuss portions of Powertech's Application that contain local information related to hydraulic connections between aquifers.[235] Also, the NRC Staff contends that Consolidated Petitioners fail to cite any regulation or legal authority that would require Powertech to include local information in its Application.[236] Based on these arguments, the NRC Staff claims that Contention H is inadmissible because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The Board determines that Consolidated Petitioners' Contention H, like Contentions A, B, and F, *supra*, is inadmissible because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). As pled, Contention H consists of a single sentence that alleges the Application fails to include studies on the hydraulic connection of aquifers that are local to the proposed Dewey-Burdock site.[237] At oral argument, however, Consolidated Petitioners contended that the studies they believe should have been included in Powertech's

[231] Petition at 41.
[232] Powertech Answer to Petition at 59.
[233] *Id.*
[234] *Id.*
[235] Staff Answer to Petition at 38.
[236] *Id.*
[237] Petition at 41.

Application are attached to Dr. Jarding's expert opinion and cited a number of regulations they believe require Powertech to use local studies.[238]

Contention H fails for two reasons. First, Consolidated Petitioners fail to cite to any local studies in their Petition that Powertech could have or should have used in its Application. At oral argument, counsel for Consolidated Petitioners claimed that examples of local studies were attached to "Dr. Jarding's geological summary of published studies"[239] but failed to specify which of the more than a dozen studies cited in Dr. Jarding's summary are examples that would support this contention. As discussed with regard to Consolidated Petitioners' Contentions A, B, and F above, the Board cannot be expected to search through the Petition to find information that may support Consolidated Petitioners' contentions. Consolidated Petitioners did not refer to these studies in their pleading of Contention H, and Dr. Jarding did not make the allegation in her summary that these studies should have been used by the Applicant. Therefore, Consolidated Petitioners fail to provide adequate alleged facts or expert opinion to support Contention H, in contravention of 10 C.F.R. § 2.309(f)(1)(v).

Secondly, and more importantly, Consolidated Petitioners do not point to any NRC regulation that would require Powertech to include local studies in its Application. NRC Staff stated at oral argument that they are unaware of a regulation that requires this.[240] Consolidated Petitioners' failure to point to a regulation that requires the inclusion of omitted information in an application is fatal under 10 C.F.R. § 2.309(f)(1)(vi) and thus precludes the admission of Contention H. The Board therefore concludes that Consolidated Petitioners' Contention H is *inadmissible.*

8. Consolidated Petitioners' Contention I[241]

Consolidated Petitioners' Contention I consists of an amalgam of allegations asserting that Powertech's Application violates 10 C.F.R. Part 40, Appendix A and 10 C.F.R. § 51.45(c) and (e). Consolidated Petitioners support their claim of alleged violations with 100 statements of various lengths that are apparently meant to serve as bases for this contention. Due to the sheer length of Consolidated Petitioners' Contention I and the wide-ranging bases used to support it, the Board will not attempt to discuss each individually here. We note that some of the bases

[238] Tr. at 369, 370.

[239] Tr. at 369.

[240] Tr. at 370.

[241] Ordinarily the Board would include Contention I as presented by Consolidated Petitioners in their Petition. However, Contention I spans fifteen pages of the Petition and will not be reproduced in full here. *See* Petition at 41-56.

provided by Consolidated Petitioners raise issues that also are presented by other contentions proffered by Consolidated Petitioners.[242]

In the first 68 bases, Consolidated Petitioners allege that Powertech's Application violates 10 C.F.R. § 51.45(c) and (e) and Appendix A to Part 40 because it fails to provide specific analyses and omits the disclosure of adverse information. Bases 1-68 point to specific portions of the Application and take issue with the adequacy of the analyses provided or allege that Powertech fails to disclose information that may be adverse to its interests.

Consolidated Petitioners provide Bases 69-90 to support their claim that Powertech's Application is in violation of 10 C.F.R. § 40.9 because Powertech's Application does not provide the NRC with information that is both complete and accurate. Consolidated Petitioners list twenty-one examples of Powertech's alleged misrepresentations in the Application. Finally, Bases 91-100 allege that Powertech's Application violates 10 C.F.R. § 40.32(d) because Consolidated Petitioners claim that the above-mentioned misrepresented, inaccurate, or missing information poses unacceptable environmental risks that make issuance of the license inimical to the public health and safety.

Both Powertech and the NRC Staff oppose admission of Contention I and diligently refute each of the 100 bases provided by Consolidated Petitioners. Again, due to the length of the responses submitted by both parties, the Board will not attempt to discuss their arguments in detail. The vast majority of Powertech's responses to Consolidated Petitioners' asserted bases state that the alleged omissions or misstatements do not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi) because "they do not have a basis in law and are discussed in Powertech's Application."[243] Additionally, Powertech refutes some bases on the grounds that Consolidated Petitioners have not provided any alleged facts or expert opinion to support their statements.[244]

Like Powertech, the NRC Staff attempts to refute all of Consolidated Petitioners' bases on the grounds that they do not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and/or (vi). The Staff argues that most of the bases are "merely two- or three-sentence assertions with no apparent factual, legal, or expert support."[245] Furthermore, the Staff claims that "the Petitioners do

[242] For example, Bases 1, 4, and 5 raise issues similar to the ones raised in Contention D, Bases 6 and 89 raise issues similar to the ones raised in Contention F, Bases 10 and 11 raise issues similar to the ones raised in Contention H, and Bases 14, 71, and 94 raise issues similar to the ones raised in Contention K.

[243] *See, e.g.*, Powertech Answer to Petition at 71, 75, 76.

[244] *See, e.g.*, *id.* at 89, 93, 94.

[245] Staff Answer to Petition at 39.

not cite the specific language of [the] regulations and explain why, as a matter of law, the information they identify must be included with the Application."[246]

Contention I is problematic from a number of perspectives. The first question that Contention I raises is whether it is a single contention with 100 bases, 100 separate contentions under a single heading, or three separate contentions in which the 100 bases are divided by the regulations the Consolidated Petitioners believe Powertech has, or the Commission will, violate if a license is granted. Secondly, does Contention I, as submitted by Consolidated Petitioners, satisfy all the subparts of section 2.309(f)(1) necessary to admit this contention whether it is viewed as a single contention, 100 contentions, or three contentions?

If Contention I is viewed as 100 separate contentions, it is clearly not admissible. None of the 100 bases taken individually addresses the six elements of 10 C.F.R. § 2.309(f)(1)(i)-(vi).[247] Indeed, many of the 100 bases are but a single phrase or sentence that at best alludes to only one element of section 2.309(f)(1). The NRC Staff and Powertech address each of the bases in their Answers as if it were a separate contention, citing to an element of section 2.309(f)(1) that is not addressed in that single basis and conclude one-by-one that none of the 100 bases is admissible as a contention. Of course, when using such an "atomizing" approach, no single basis would be admissible as a contention.[248]

If Contention I is viewed as three separate contentions, divided by the regulation allegedly violated, it also is not admissible. Counsel for the Consolidated Petitioners at oral argument seemed to recommend that the Board approach this contention as three separate contentions.[249] The three separate contentions would be as follows:

> Contention I(A): Powertech's Application violates 10 C.F.R. § 51.45(c) and (e) and Appendix A to Part 40 because it fails to provide specific analyses and omits the disclosure of adverse information. Bases 1 through 68 are associated with Contention I (A).

Contention I(A), as supported by bases 1 through 68, is not admissible because it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). Contention I(A) does not contain references to the specific sources and documents on which Consolidated Petitioners intend to rely to support their position on the issue.

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[246] *Id.*

[247] *See* Attachment A to this Memorandum and Order, which specifies in a three-page chart the infirmities of Contention I, if it is analyzed as 100 separate contentions. *Cf. System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 15 (2005) (Commission explains why Board decisions on contention admissibility are permissibly and "customarily terse.").

[248] *See Levy County*, CLI-10-2, 71 NRC at 36.

[249] Tr. at 370-71.

Apparently, Consolidated Petitioners would have the Board sift through the totality of their filed pleadings, attachments, and declarations to stitch together various statements to satisfy 10 C.F.R. § 2.309(f)(1). A Licensing Board is to rule upon the admissibility of a contention as that contention is spelled out in the pleadings. Further, for those bases in which Consolidated Petitioners allege the Application fails to contain information on a relevant matter as required by law, the Consolidated Petitioners fail to identify each failure, refer to the specific portions of the Application that contain this failure, or provide the supporting reasons for Consolidated Petitioners' belief. This contention thus does not comply with 10 C.F.R. § 2.309(f)(1)(vi).

> Contention I(B): Powertech's Application is in violation of 10 C.F.R. § 40.9 because it is not complete and accurate. Bases 69 through 90 are associated with Contention I(B).

Contention I(B) is not admissible because bases 69 through 90 do not provide a concise statement of the alleged facts or expert opinions that support Consolidated Petitioners' position on the issue and on which Consolidated Petitioners intend to rely at hearing. Further, Contention I(B) and bases 69 through 90 make no reference to "the specific sources and documents on which the Petitioner intends to rely to support its position on the issue."[250] Contention I(B) is merely a listing of issues with which Consolidated Petitioners disagree with the Application. It is the form of notice pleading that the Commission has long held is insufficient.[251]

> Contention I(C): Powertech's Application violates 10 C.F.R. § 40.32(d) because issuance of the license would be inimical to the public health and safety. Bases 91 through 100 are associated with Contention I(C).

Contention I(C) is inadmissible as well. As was the case with Contention I(B), it does not provide a concise statement of the alleged facts or expert opinions that support Consolidated Petitioners' position on the issue and on which Consolidated Petitioners intend to rely at hearing. Further, Contention I(C) and bases 91 through 100 make no reference to "the specific sources and documents on which the Petitioner intends to rely to support its position on the issue."[252] Contention I(C) is merely another listing of issues with which Consolidated

[250] 10 C.F.R. § 2.309 (f)(1)(v).

[251] *See Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-15, 71 NRC 479, 482 (2010); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 428-29 (2003).

[252] 10 C.F.R. § 2.309(f)(1)(v).

Petitioners disagree with the Application. Once again, it is the form of notice pleading that the Commission has long held is insufficient.[253]

Given that Contention I fails if considered as 100 separate contentions or as three contentions organized based on purported Application deficiencies with particular regulatory requirements, this leaves us only to consider, as was suggested at one point during the oral argument by counsel for Consolidated Petitioners, that Contention I be treated as a single contention.[254] Viewed as a single contention, Contention I is a veritable "kitchen sink" of a contention. It touches upon literally dozens of topics, including air and water quality, environmental justice, historical and cultural impacts, emergency planning, meteorological impacts, work force and aging population impacts, wildfires, and transportation impacts, but nowhere does it provide for any of them the "specific statement of the issue of law or fact to be raised or controverted" required by 10 C.F.R. § 2.309(f)(1)(i). Contention I, read as a single contention, is a lengthy list of issues on which Consolidated Petitioners indicate they disagree with the Application. The contention does not, however, demonstrate that any "issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding," as required by 10 C.F.R. § 2.309(f)(1)(iv); nor does it satisfy the requirements of section 2.309(f)(1)(vi) because it does not provide sufficient information to show that a genuine dispute exists with the Applicant on a material issue of law or fact.

In reaching this conclusion, we note that at oral argument, the Board tried to focus the inquiry to ascertain how each of the contentions proffered by the Consolidated Petitioners met the six requirements of 10 C.F.R. § 2.309(f)(1). Counsel for Consolidated Petitioners replied that the Board must piece together and complete a contention by searching the Petition, the declarations, and the exhibits appended to the Petition.[255] Instead of having each contention cite to an affidavit, or portion of an affidavit or exhibit relied upon, Consolidated Petitioners simply contend that all the affidavits submitted with their Petition "apply to all of the contentions."[256] Consolidated Petitioners contend further that "all the information submitted is to be read as a whole."[257] As the Commission has made clear in the cases cited in Section V.A, above, it is not within the province of a Licensing Board to piece together and create an admissible contention from a lengthy petition with numerous affidavits, declarations, and exhibits in an effort to create a viable contention. Rather, it is the responsibility of the petitioner to submit a contention containing all six elements required by 10 C.F.R. § 2.309(f)(1) in an orderly and organized fashion. Simply put, it is a petitioner's burden of

[253] *See supra* note 251.
[254] Tr. at 373. *But see* Tr. at 381.
[255] *Id.* at 288-96.
[256] *Id.* at 343.
[257] *Id.*

going forward at this stage of the proceeding to submit a complete, self-contained contention addressing each of the elements required by 10 C.F.R. § 2.309(f)(1). To be admissible, a contention must comply with every requirement listed in 10 C.F.R. § 2.309(f)(1).[258] Because the contention here fails to meet each of the contention admissibility requirements, it must be rejected.[259] Contention I is *not admitted.*

9. Consolidated Petitioners' SUNSI Contention (Designated Contention K)

On April 30, 2010, Consolidated Petitioners filed a new contention which it states is based on recently released SUNSI material.[260] The Board designates this new contention as Contention K. Contention K states:

> The Application is not in conformance with 10 C.F.R. § 40.9 and 10 C.F.R. § 51.45 because the Application does not provide analyses that are adequate, accurate, and complete in all material respects to demonstrate that cultural and historic resources . . . are identified and protected pursuant to Section 106 of the National Historic Preservation Act. As a result, the Application fails to comply with Section 51.60 . . . .[261]

Consolidated Petitioners contend that Powertech's Environmental Report (ER) is not complete in all material respects because Powertech's analysis of cultural resources in the mining area is based on the Augustana Report,[262] which Consolidated Petitioners maintain is flawed.[263] Consolidated Petitioners argue that the Augustana Report disregarded a number of historic sites by designating them ineligible for inclusion on the National Register and underevaluated a number of other sites that Consolidated Petitioners call "unknowns."[264] Consolidated Petitioners attach the expert opinion of Louis Redmond to support their assertion that the Augustana Report is an inadequate source upon which to base Powertech's analysis of cultural resources.[265]

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[258] *U.S. Army* (Jefferson Proving Ground Site), LBP-06-27, 64 NRC 438, 447 (2006).

[259] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); 69 Fed. Reg. at 2226.

[260] *See* New Contention.

[261] *Id.* at 1-2.

[262] The Augustana Report is part of Powertech's Level III Cultural Resources Evaluation for the Dewey-Burdock site. This evaluation was prepared by the Archaeology Laboratory of Augustana College (Rock Island, IL). The publicly available documents have been redacted of SUNSI material and are included in ADAMS as part of Powertech's Application (ADAMS Accession No. ML091030742).

[263] New Contention at 3-4.

[264] *Id.* at 4.

[265] *Id.* at 5.

Both Powertech and the NRC Staff oppose admission of Contention K. Powertech argues, again, that 10 C.F.R. § 51.45 does not prescribe any technical adequacy requirements, and that "Petitioners offer no support for how section 51.45 requires Powertech to submit its historic and cultural resource evaluation of the proposed Dewey-Burdock ISL site in the manner in which Petitioners allege."[266] Further, Powertech maintains that the Augustana Report is analytically complete and correct and that Consolidated Petitioners must not have read the entire report.[267] Powertech also asserts that the regulations do not require Powertech to investigate further the "unknown" sites or to perform subsurface testing on sites that were determined by Augustana to be ineligible for inclusion in the National Register.[268] Finally, Powertech argues that Contention K fails to dispute the data and conclusions offered by Powertech in its Application, and is therefore inadmissible under 10 C.F.R. § 2.309(f)(1)(vi).[269]

The NRC Staff maintains that 10 C.F.R. § 40.9, cited by Consolidated Petitioners in this Contention, is irrelevant to the issues they raise, and that Consolidated Petitioners fail to show that Powertech has not met the requirements of 10 C.F.R. §§ 51.45 and 51.60.[270] Furthermore, the Staff argues that Consolidated Petitioners mischaracterize the Augustana Report, in that the report is more than a mere listing of existing sites.[271] The NRC Staff also submits that, contrary to Consolidated Petitioners' assertion, subsurface testing was in fact conducted at the Dewey-Burdock site, but that subsurface testing of *every* possible cultural site is not required under the regulations.[272] With regard to the "unknown" sites, the NRC Staff states that any unevaluated sites are located outside the Dewey-Burdock area that will initially be disturbed and so will be evaluated at a later date.[273] In sum, the NRC Staff claims that Consolidated Petitioners fail to explain why Powertech needs to evaluate all archaeological sites at this time, and fail to raise a genuine dispute with Powertech's Application, in contravention of 10 C.F.R. § 2.309(f)(1)(v) and (vi).[274]

The regulations cited by Consolidated Petitioners in Contention K (10 C.F.R.

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[266] Powertech Answer to New Contention at 11-12. Powertech also argues that 10 C.F.R. §§ 40.9 and 51.60, both cited by Consolidated Petitioners, will offer them no relief because both sections merely set forth Commission requirements, and do not prescribe the ways in which an applicant is to meet these requirements.

[267] New Contention at 13.

[268] *Id.* at 14-15.

[269] *Id.* at 16.

[270] Staff Answer to New Contention at 5-6.

[271] *Id.* at 7.

[272] *Id.* at 8-9.

[273] *Id.* at 11.

[274] *Id.* at 12.

§§ 40.9, 51.45, and 51.60) concern the information that needs to be included in an applicant's ER in order for a license to be issued. Part 51 of the NRC's regulations implements NEPA and requires an agency assessment of environmental impacts when a project is proposed, as is the case here. Under 40 C.F.R. § 1502.16(g) of the Council on Environmental Quality's (CEQ) NEPA implementing guidance regulations,[275] cultural and historic resources are to be considered as part of the environmental impacts assessment that must be completed.[276] While the duty to comply with NEPA falls upon the agency and not upon the applicant or licensee,[277] the requirements of Part 51 must be met by the applicant. Section 51.45 clearly requires an applicant to discuss in its ER "[t]he impact of the proposed action on the environment."[278] Since an impact analysis under NEPA requires that cultural and historic resources be considered, we conclude that a sufficient discussion of cultural and historic resources must be included in an applicant's ER.

Though such a discussion is present in Powertech's Application, Consolidated Petitioners allege that the cultural resources information included is inadequate. Whether the information Powertech provides is adequate to satisfy 10 C.F.R. §§ 40.9, 51.45, and 51.60 is a merits determination that this Board is prohibited from making at this time. In other words, whether or not the Augustana Report is an adequate study upon which to base many of Powertech's conclusions in its Application raises a genuine dispute with Powertech's Application. Additionally, Consolidated Petitioners have provided alleged facts and the expert opinion of Louis A. Redmond[279] to support their assertion that the cultural resources information in the Application is inadequate. Contrary to the arguments of the NRC Staff and Powertech, the Board concludes that Consolidated Petitioners therefore meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). Contention K is *admitted*.

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[275] CEQ's regulations receive substantial deference from the federal courts in interpreting the requirements of NEPA. *See, e.g., Department of Transportation v. Public Citizen*, 541 U.S. 752, 757 (2004); *Andrus v. Sierra Club*, 442 U.S. 347, 356-58 (1979). The Supreme Court, however, has expressly left open the issue whether CEQ regulations are binding on the NRC. *See Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 99 n.12 (1983). The NRC takes the position that "NRC as an independent regulatory agency can be bound by CEQ's NEPA regulations only insofar as those regulations are procedural or ministerial in nature. NRC is not bound by those portions of CEQ's NEPA regulations which have a substantive impact on the way in which the Commission performs its regulatory functions." 49 Fed. Reg. 9352 (Mar. 12, 1984). But the Commission also has "an announced policy to take account of the [CEQ regulations] voluntarily, subject to certain conditions." 10 C.F.R. § 51.10(a).

[276] *See Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-05-26, 62 NRC 442, 450 (2005).

[277] *Levy County*, CLI-10-2, 71 NRC at 33.

[278] 10 C.F.R. § 51.45(b)(1).

[279] Dr. Redmond is president of Red Feather Archaeology and has prepared cultural resource and heritage resource surveys.

C. Board Rulings on the Oglala Sioux Tribe's Proposed Contentions

1. The Tribe's Contention 1

The Oglala Sioux states in Contention 1:

> Failure to meet applicable legal requirements regarding protection of historical and cultural resources, and failure to involve or consult the Oglala Sioux Tribe as required by Federal law.[280]

The Oglala Sioux claims that Powertech has failed to comply with federal law and NRC regulations because it has not consulted with the Oglala Sioux regarding historical and cultural sites that have been identified by Powertech in its Application.[281] The Oglala Sioux also states that it is concerned that the number of sites that might be impacted by Powertech's project may be higher than the number reported in the Application due to Powertech's failure to consult with the Oglala Sioux.[282] The Oglala Sioux cites a number of federal regulations, such as the NHPA, NEPA,[283] and an Executive Order,[284] that require consultation with those Indian Tribes "that attach[ ] religious and cultural significance" to cultural and historical sites. The Tribe asserts that these regulations require consultation as soon as possible in the application process, and that Powertech has been dilatory in satisfying this requirement.[285]

Furthermore, the Oglala Sioux points to NRC regulations and guidance that it claims require the Applicant to consult with it regarding these cultural sites. The Tribe argues that 10 C.F.R. § 51.45(b) and NUREG-1569 implement the requirements of NEPA and the NHPA, thereby requiring Powertech to consult with the Tribe.[286] The Oglala Sioux distinguishes the circumstances currently before the Board from those in the *Crow Butte II* proceeding, where the Commission determined that the Tribe's contention regarding compliance with the consultation requirements was not ripe.[287] The Oglala Sioux argues that here, "the

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[280] Tribe Petition at 12.

[281] *Id.*

[282] *Id.* The Oglala Sioux provides the affidavit of Wilmer Mesteth as support for this contention. *See* Affidavit of Wilmer Mesteth (Apr. 1, 2010).

[283] 42 U.S.C. § 4321.

[284] Presidential Executive Order 13,007, Indian Sacred Sites, 61 Fed. Reg. 22,951 (May 24, 1996); Tribe Petition at 16.

[285] Tribe Petition at 16.

[286] *Id.* at 12-13.

[287] *Id.* at 16. *See also Crow Butte II*, CLI-09-9, 69 NRC at 348-51.

NHPA requires consultation under Section 106 to begin as early as possible in the consideration of an undertaking."[288]

Both Powertech and the NRC Staff oppose admission of Contention 1. Powertech makes two arguments in attempting to refute the admissibility of Contention 1. First, Powertech claims that 10 C.F.R. § 51.45(b)-(d) does not require it to consult with the Tribe, as the Tribe argues, but instead "only describe[s] the categories of potential impacts, to the extent relevant, that a license applicant should address in an environmental report."[289] Because Powertech's Application analyzes the cultural and historic resources involved, Powertech asserts that Part 51 has not been violated because it does not impose an adequacy requirement on Powertech.[290]

Powertech's second argument deals with its duty to satisfy the consultation requirements under NEPA and the NHPA. Powertech argues that the duty to consult with the Oglala Sioux Tribe under these two Acts is the duty of the NRC Staff and not the duty of the applicant.[291] NEPA and the NHPA, according to Powertech, impose the duty to consult on a federal agency, and not a licensee.[292] Furthermore, Powertech submits that Contention 1 is not ripe for the Board's consideration at this time, because, under the Commission's ruling in *Crow Butte II*,[293] the Oglala Sioux Tribe cannot claim that the NRC Staff has failed to comply with its duty when the NEPA review process has only just begun.[294]

The NRC Staff argues that the Tribe fails to support its claim that Powertech insufficiently evaluated historic and cultural resources at its proposed ISL site.[295] The Staff claims that the affidavit of Mr. Mesteth, on which the Oglala Sioux relies for many of its assertions, rests on statements that are either unsupported or are misreadings of Powertech's Application.[296] For this reason, the Staff argues that Contention 1 fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and fails to raise a genuine dispute with Powertech's Application in contravention of 10 C.F.R. § 2.309(f)(1)(vi). Like Powertech, the Staff also argues that Contention 1 is not ripe for review by this Board under the Commission's ruling in *Crow Butte II*.[297]

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[288] Tribe Petition at 17.
[289] Powertech Answer to Tribe at 39.
[290] *Id.* at 39.
[291] *Id.*
[292] *Id.*
[293] *Crow Butte II*, CLI-09-9, 69 NRC at 348-51.
[294] Powertech Answer to Tribe at 39-40.
[295] Staff Answer to Tribe at 16.
[296] *Id.*
[297] *Id.* at 20. *See also Crow Butte II*, CLI-09-9, 69 NRC at 348-51.

In its Reply, the Oglala Sioux maintains that the declaration of Mr. Mesteth does challenge the adequacy of Powertech's cultural resources information, contrary to what Powertech and the NRC Staff assert.[298] The Tribe asserts that this contention is ripe because the violations to the NHPA and NEPA are ongoing and should not be relegated to the later part of the proceedings before being redressed.[299] Finally, the Oglala Sioux claims that the NRC Staff is inappropriately arguing the merits of Contention 1, and that this contention meets all the requirements necessary at this stage of the proceeding.[300]

Insofar as Contention 1 challenges the adequacy of the cultural resource information in Powertech's Application, the Board determines that Contention 1 is admissible for the same reasons we concluded that Consolidated Petitioners' Contention K was admissible. The Tribe provides the opinion of Mr. Mesteth to support its assertion that the cultural resource information in Powertech's Application is inadequate to meet the requirements of 10 C.F.R. §§ 51.45 and 51.60. Moreover, this information is adequate, as far as this Board is concerned, to raise a genuine dispute with Powertech's application. Accordingly, contrary to the arguments of Powertech and the NRC Staff, the Board concludes that the Tribe's Contention 1 does in fact meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

In Contention 1, the Tribe also alleges that Powertech has failed to consult with the Tribe regarding identified and potential cultural and historic resources found on the proposed mining site. As far as this issue is concerned, the Board is obligated under existing Commission precedent to deny this portion of Contention 1. In *Crow Butte II*, the Commission denied a similar contention submitted by the Oglala Sioux Tribe because it found the matter to be unripe at the contention admissibility stage of the proceeding.[301] At oral argument, counsel for the Tribe attempted to distinguish the present proceeding from the Commission's decision in *Crow Butte II* by arguing that NEPA and the NHPA require consultation to begin as early as possible in the licensing process and that there is an ongoing violation of federal law since this process has yet to begin here.[302]

As the Commission made clear in *Crow Butte II*, it is not the duty of an applicant to consult with a Tribe regarding cultural resources at a proposed site, but instead is the duty of the agency to initiate and follow through with the consultation

[298] Tribe Reply at 22.
[299] *Id.* at 23.
[300] *Id.* at 21.
[301] *Crow Butte II*, CLI-09-9, 69 NRC at 350-51.
[302] Tr. at 129-31.

process.[303] The alleged failure to consult in this proceeding, therefore, cannot be the fault of Powertech. And, because the NRC Staff has not completed its environmental review of the Dewey-Burdock proposed project, this Board cannot find that they have been dilatory in their duty to consult with the Tribe.[304] As noted by the Commission in its *Crow Butte II* ruling, the Tribe is free to file a contention later on in this proceeding if, after the Staff releases its environmental documents, the Tribe believes that the Staff has failed to satisfy its obligations under NEPA and the NHPA.[305]

In sum, the Board concludes that the component of Contention 1 that deals with the inadequacy of the historic and cultural resource information in Powertech's Application is *admissible.* However, the Board will not consider at this time[306] the issue of the alleged failure to consult with the Tribe regarding cultural and historic resources on Powertech's proposed Dewey-Burdock site. Consultation with the Tribe is material and within the scope of this proceeding. However, this portion of Contention 1 is not ripe. The Tribe must wait until the draft supplemental environmental impact statement (SEIS) is issued by the NRC Staff to interpose the issue of the adequacy of the agency's consultation efforts.[307] Whether and how the Staff fulfills its NHPA and NEPA obligations are issues that could form the basis of a new contention.[308]

At this time we determine that the portion of Contention 1 that deals with a failure to consult *inadmissible.* Contention 1 is *admitted* as follows:

> Powertech's Application is deficient because it fails to address adequately protection of historical and cultural resources.

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[303] 36 C.F.R. § 800.2(c)(2)(ii)(D) (stating that "[w]hen Indian tribes . . . attach religious and cultural significance to historic properties off tribal lands, section 101(d)(6)(B) of the act requires *Federal agencies* to consult with such Indian tribes . . ." (emphasis added)).

[304] Tr. at 132-33.

[305] *Crow Butte II*, CLI-09-9, 69 NRC at 351.

[306] *Id.*

[307] The Staff has indicated that it will issue an SEIS to supplement the analysis in its generic EIS for ISL facilities. *See* Staff Answer to Tribe at 4; NUREG-1910, "Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities — Draft Report for Comment," Vol. 1 (July 28, 2008) (ADAMS Accession No. ML0914802440).

[308] *See* 10 C.F.R. § 2.309(f)(2) (providing that, with respect to issues arising under NEPA, the petitioner may file new contentions "if there are data or conclusions in the NRC draft or final environmental impact statement . . . that differ significantly from the data or conclusions in the applicant's documents"). Such a contention is usually considered timely if filed within thirty (30) days of publication of the draft environmental impact statement. *See, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 6 (2008).

2. The Tribe's Contention 2

The Oglala Sioux states in Contention 2:

> Failure to include necessary information for adequate determination of baseline ground water quality.[309]

The Oglala Sioux argues that Powertech's Application violates 10 C.F.R. § 51.45, Appendix A to Part 40 and NEPA by failing to "provide an adequate baseline groundwater characterization or demonstrate that groundwater samples were collected in a scientifically defensible manner, using proper sample methodologies."[310] The Tribe provides the expert opinion of Dr. Robert Moran to support Contention 2. Dr. Moran alleges analytical deficiencies in the groundwater baseline characterization (e.g., there is no "statistically sound data set for *all* Baseline Water Quality data,"[311] the historic water quality data is not statistically summarized in one place for the reader, and it is unclear whether Powertech has baseline data for non-ore zone regions),[312] deficiencies with regard to characterization of non-ore zone regions, and deficiencies regarding the integrity of the baseline water quality data obtained by Powertech.[313]

Both Powertech and the NRC Staff oppose admission of Contention 2. Powertech argues that the pertinent regulation, 10 C.F.R. § 40.32(e), does not require detailed groundwater baseline information at this stage of the licensing process.[314] Also, Powertech identifies specific areas in the Application that contain the information the Tribe claims was omitted.[315] Finally, Powertech claims that Contention 2 "does not offer any information demonstrating a significant link between its allegations and a specific potential health and safety or environmental impact."[316]

The NRC Staff attempts to refute each of Dr. Moran's assertions in Contention 2.[317] The Staff argues that Dr. Moran fails to dispute the baseline data provided in Powertech's Application and fails to cite requirements that Powertech include more information in the Application.[318] The NRC Staff submits that Contention 2

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[309] Tribe Petition at 17.
[310] *Id.*
[311] *Id.* at 19.
[312] *Id.* at 18-19.
[313] *Id.*
[314] Powertech Answer to Tribe at 40.
[315] *Id.* at 40-41.
[316] *Id.* at 41.
[317] Staff Answer to Tribe at 21-24.
[318] *Id.* at 22, 23, 24.

cannot be admitted because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).[319]

In its Reply, the Oglala Sioux argues that the NRC Staff and Powertech are again arguing the merits of Contention 2 in their answers and that Contention 2 is properly pled under 10 C.F.R. § 2.309(f)(1).[320]

The Board determines that the Tribe's Contention 2 is admissible. Counsel for Powertech submitted at oral argument that 10 C.F.R. § 40.32(e) prohibits it from gathering complete information on baseline water quality.[321] The Board disagrees with this interpretation of the regulation. The last sentence of 10 C.F.R. § 40.32(e) explicitly exempts "preconstruction monitoring and testing to establish background information" from the prohibition on commencement of construction. We believe that such preconstruction monitoring includes adequate assessments of baseline water quality. This interpretation is supported by the requirement in Criterion 7 of Appendix A to Part 40, which states that an applicant must provide "complete baseline data on a milling site and its environs." We acknowledge that, as discussed *infra*, Appendix A to Part 40 does not always apply to ISL facilities. However, at oral argument, the Staff conceded that the first sentence of Criterion 7, which requires complete baseline data, applies to Powertech in this case.[322] Furthermore, the NRC Staff has refused to take a position on whether Powertech has provided the complete and necessary baseline water quality data in its Application because its review is ongoing.[323]

We conclude that the Tribe has raised a genuine dispute as to the adequacy and completeness of the information Powertech provided in its Application. We also conclude that the Tribe identifies an issue that is within the scope of this proceeding and material to the findings the NRC must make in evaluating Powertech's Application. Further, the Tribe raises a genuine dispute with Powertech's Application, namely whether Powertech has provided sufficient detail and scientifically defensible methodology for its baseline water quality data. The Oglala Sioux, with the expert opinion of Dr. Moran, provides support for its assertions. We therefore conclude that the Oglala Sioux has met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) and *admit* Contention 2.

3. The Tribe's Contention 3

The Oglala Sioux states in Contention 3:

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[319] *Id.* at 25.
[320] Tribe Reply at 25.
[321] Tr. at 163.
[322] *Id.* at 158.
[323] *Id.*

> Failure to include adequate hydrogeological information to demonstrate ability to contain fluid migration.[324]

The Oglala Sioux argue that Powertech fails to meet the requirements of 10 C.F.R. §§ 40.31(f), 51.45, 51.60, Appendix A to Part 40, NEPA, and NUREG-1569[325] by neglecting "to provide sufficient information regarding the geological setting of the area . . . ."[326] The Oglala Sioux submits that adequate information is necessary "to adequately characterize the site and off-site hydrogeology to ensure confinement of the extraction fluids."[327] If the hydrogeology is not properly characterized, the Oglala Sioux contends, the effects of Powertech's proposed project on surface and ground waters cannot be properly evaluated.[328] The Tribe provides the expert opinion of Dr. Moran, who supports the Tribe's arguments that Powertech's Application includes "unsubstantiated assumptions as to the isolation of the aquifers in the ore-bearing zones and failure to account for natural and man-made hydraulic conductivity through natural breccias pipe formations and the historic drilling of literally thousands of drill holes in the aquifers and ore-bearing zones in question, which were not properly abandoned."[329] The Oglala Sioux also cite an EPA document that criticizes the Commission's environmental review process for ISL mining.[330]

Both Powertech and the NRC Staff oppose admission of Contention 3. First, Powertech asserts that the Commission "only requires generalized information regarding pre-operational baseline water quality in the proposed recovery zone and at prospective monitor well locations on a regional basis and does not require detailed site-specific information until the 'post-licensing.'"[331] Powertech then goes on to attempt to discredit specific statements made by Dr. Moran in support of Contention 3. With regard to each statement, Powertech asserts that the Oglala Sioux has failed to offer any genuine dispute on a material issue of fact because Contention 3 does not challenge the information provided in Powertech's Application, as 10 C.F.R. § 2.309(f)(1)(vi) requires.[332]

The NRC Staff argues that Contention 3 should be dismissed by the Board because it fails to meet the contention admissibility requirements of 10 C.F.R.

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[324] Tribe Petition at 21.

[325] NUREG-1569 is the NRC Staff's Standard Review Plan for In-Situ Leach Uranium Extraction License Applications (ADAMS Accession No. ML032250177).

[326] *Id.*

[327] *Id.* at 22.

[328] *Id.*

[329] *Id.*

[330] *Id.*

[331] Powertech Answer to Tribe at 42.

[332] *See id.* at 42, 43, 44, 45.

§ 2.309(f)(1)(v) and (vi).[333] The NRC Staff asserts that Dr. Moran's statements in support of Contention 3 fail to take into account sections of Powertech's Application that address regional hydrogeology, mine data, and other site-specific data.[334] Moreover, the NRC Staff claims that Dr. Moran's statements are based on a misreading of Powertech's Application or are unsupported assertions.[335]

In its Reply, the Oglala Sioux maintains that Dr. Moran's statements, as a whole, support the admission of Contention 3, and that the NRC Staff's and Powertech's practice of attacking his statements in isolation is "spurious, akin to setting up a straw man."[336] Further, the Oglala Sioux asserts that it did in fact take issue with specific analyses and data in Powertech's Application, and cites portions of the Application it felt were inadequate, thereby raising a genuine dispute with the Application.[337]

The Board determines that the Tribe's Contention 3 is admissible. The Tribe identifies an issue that is within the scope of this proceeding and material to the findings the NRC must make in evaluating Powertech's Application. Further, the Tribe raise a genuine dispute with Powertech's Application, namely with respect to the adequacy of information needed to characterize the site and offsite hydrogeology to ensure confinement of the extraction fluids. The Oglala Sioux provides the expert opinion of Dr. Moran to support its assertions. We therefore conclude that the Oglala Sioux has met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) and *admit* Contention 3.

4. The Tribe's Contention 4

The Oglala Sioux states in Contention 4:

> Inadequate analysis of Ground Water Quantity Impacts.[338]

The Oglala Sioux argues that Powertech's Application violates 10 C.F.R. §§ 40.32(c), (d), and 51.45 by failing to analyze the impacts of groundwater consumption on public health and safety and property.[339] The Oglala Sioux also submits that Powertech's Application presents conflicting groundwater consumption information, thereby making this information impossible to evaluate

[333] Staff Answer to Tribe at 26.
[334] *Id.* at 26, 27, 28, 29, 30.
[335] *Id.* at 26.
[336] Tribe Reply at 26-27.
[337] *Id.* at 27-28.
[338] Tribe Petition at 25.
[339] *Id.*

accurately.[340] To support Contention 4, the Oglala Sioux provides the declaration of Dr. Moran.[341]

Both Powertech and the NRC Staff oppose admission of Contention 4. Again, Powertech makes the argument that 10 C.F.R. § 51.45 does not impose an adequacy requirement on Powertech and that its inclusion of information on groundwater consumption in the Application is sufficient to comply with that regulation.[342] Indeed, Powertech asserts that the Application addresses groundwater consumption impacts and that neither the Oglala Sioux nor Dr. Moran provides information that contradicts Powertech's data or analyses.[343] Therefore, Powertech claims that Contention 4 should be denied because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi).

The NRC Staff argues that Contention 4 should be dismissed because Powertech does, in fact, provide an analysis of groundwater impacts in its Application.[344] Furthermore, NRC Staff submits that Dr. Moran's statements that Powertech's estimates of water usage are inconsistent are not supported and fail to establish a genuine issue with Powertech's Application, thereby failing to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).[345]

In its Reply, the Oglala Sioux once more accuses the NRC Staff and Powertech of arguing against the admission of Contention 4 based on a merits analysis.[346] In addition, the Oglala Sioux maintains that, contrary to Staff's and Powertech's assertions, the Tribe Petition does reference portions of the Application that it determined were relevant to the issues raised in Contention 4.[347]

The Board determines that the Tribe's Contention 4 meets the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). The issue raised is within the scope of this licensing proceeding and is material to the findings the NRC must make. The Tribe supports its assertions with the expert opinion of Dr. Moran, who, according to Tribe counsel, opines that "there is no credible project water balance that investigates the potential impact on local groundwater levels."[348] In that regard, Dr. Moran describes the project area as semi-arid with an average yearly precipitation of about 12 to 13 inches. Yearly evapotranspiration (ET) estimates are roughly 70 inches per year, or about five times the yearly precipita-

[340] *Id.*
[341] *Id.* at 26.
[342] Powertech Answer to Tribe at 46.
[343] *Id.*
[344] Staff Answer to Tribe at 33.
[345] *Id.* at 34.
[346] Tribe Reply at 30.
[347] *Id.*
[348] Tr. at 215.

tion.[349] Dr. Moran states that with the project expected to operate between 7 and 20 years, it will require the use of tremendous volumes of local groundwater and, without a credible project water balance, it is not possible to more seriously investigate the potential that such large-volume water use might impact local/regional groundwater levels.[350]

Though there seems to be some confusion as to exactly how much water will be used during operations, the Tribe has still established a genuine material dispute with Powertech's Application. At oral argument, counsel for the Tribe stated that "the [environmental] impacts associated with . . . drawdown have not been disclosed and reviewed in the application materials."[351] Powertech and NRC Staff disagree with this assertion, but it is not for the Board to decide at this point in the proceeding which party is correct. The adequacy of the information provided in Powertech's Application will be evaluated by the Board as part of a merits analysis. Because of the time cycle of uranium mining and reclamation operations, water use patterns vary and some confusion was involved with review of the information in the Application. The basic requirement needed to satisfy this contention is a detailed description of sources and amounts of groundwater used and the effects of the use and consumption of the groundwater in the mining operations, including restoration and waste water disposal.

For the foregoing reasons, the Board concludes that the Tribe's Contention 4 is *admissible*.

5. The Tribe's Contention 5

The Oglala Sioux states in Contention 5:

> Failure to adequately calculate bond for decommissioning.[352]

The Oglala Sioux claims that, in contravention of the requirements of Appendix A to Part 40, Powertech has failed to provide a sufficient financial assurance cost estimate "to assure the availability of sufficient funds to complete the reclamation plan and the activities in the application by an independent contractor."[353] The Oglala Sioux takes issue with Powertech's decommissioning cost estimates in the Application, which are based on the assumption that there will be full production of the mine in 2011, only minor production in 2012, and no production beyond 2012. Because the Application states that operation of the mill will continue for 7

[349] *See* Environmental Report at 3-176, -177, Figure 3.6-27.
[350] Declaration of Robert E. Moran at 9 (Apr. 4, 2010).
[351] Tr. at 212.
[352] Tribe Petition at 27.
[353] *Id.*

to 20 years,[354] the Oglala Sioux submits that these estimates are insufficient for the assurance of adequate funding.[355] Furthermore, the Oglala Sioux points out that the Application indicates that restoration times for the mine may be longer than anticipated, yet the financial surety calculations do not reflect longer restoration time.[356] This Contention is supported by a declaration by Dr. Moran.

Both Powertech and the NRC Staff oppose admission of Contention 5. Powertech claims that Contention 5 should be dismissed because it is not required by law to "submit financial cost estimates for any site activities beyond the initial stages of site construction and development."[357] Powertech argues that admitting Contention 5 would require it to calculate the financial assurance for the entire Dewey-Burdock project.[358] Finally, Powertech contends that Contention 5 is essentially moot because the Commission requires Powertech "to provide updated NRC-approved financial assurance every year that accounts for the status of activities at the site . . . ."[359] Therefore, the cost calculations the Oglala Sioux is asking Powertech to furnish now will in fact be furnished over the life of the project.[360] As a result, Powertech states that Contention 5 is inadmissible because it does not raise a genuine dispute with the Application, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).

NRC Staff asserts that Contention 5 should be dismissed because the Oglala Sioux failed to explain why Powertech needs to provide additional cost estimates to those already presented in their Application.[361] Additionally, the NRC Staff argues that, because the Oglala Sioux does not challenge the methodology Powertech used to calculate total decommissioning costs, Contention 5 does not raise a genuine dispute with the Application and therefore does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi).[362] Finally, the NRC Staff claims that NRC procedures "will be sufficient to ensure that funds are available to carry out decommissioning of the Dewey-Burdock facility by an independent contractor."[363]

In its Reply, the Oglala Sioux counters NRC Staff's argument that Powertech has provided sufficient decommissioning information by stating that the NRC issued a request for additional information (RAI) regarding decommissioning,

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[354] *Id.*
[355] *Id.*
[356] *Id.*
[357] Powertech Answer to Tribe at 47-48.
[358] *Id.*
[359] *Id.* at 48.
[360] *Id.*
[361] Staff Answer to Tribe at 35.
[362] *Id.*
[363] *Id.* at 36.

suggesting that the NRC Staff does not believe that the information provided by Powertech is sufficient.[364]

Criterion 9 in Appendix A to 10 C.F.R. Part 40 requires an applicant to establish a surety arrangement that ensures sufficient funds will be available for decommissioning and decontamination of an NRC-licensed source materials site.[365] Criterion 9 provides little instruction regarding how calculations should be made, and addresses decommissioning and decontamination matters very generally. Where regulatory authority is lacking, the Commission has indicated that turning to NRC Staff guidance documents can be useful.[366] In NUREG-1569, surety bond calculations are to be estimated "[t]o the extent possible," and based on the applicant's "experience with generally accepted industry practices."[367]

The Board determines that the Tribe has not identified any specific inadequacies with Powertech's surety bond calculations as set forth in its Application. Nor has the Tribe cited any specific regulations that would require Powertech to include more information in its Application than was already included. In fact, the Tribe argues that Powertech's estimate should be higher than what it was, but does not account for the fact that these estimates are not final and will need to be updated before the license is issued.[368] As the Commission has noted, "[s]urety arrangements are matters appropriately addressed after issuance of the license, and even after completion of a hearing. Criterion 9 [of 10 C.F.R. Part 40, Appendix A] makes clear that a surety arrangement is necessary as a prerequisite to *operating*, not as a prerequisite to *licensing*."[369] As such, the Board concludes that the Tribe has not met the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), and its Contention 5 is accordingly *not admitted.*

6. The Tribe's Contention 6

The Oglala Sioux states in Contention 6:

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[364] Tribe Reply at 31.

[365] *See* 10 C.F.R. Part 40, App. A, Criterion 9; *see also Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), LBP-04-3, 59 NRC 84, 88 (2004).

[366] *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-33, 60 NRC 581, 596 (2004) (Commission acknowledges that Staff guidance documents are not legally binding, yet recognizes the usefulness in instances where legal authority is lacking).

[367] NUREG-1569 at 6-24.

[368] *See* Tr. at 318-19.

[369] *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-00-8, 51 NRC 227, 240 n.15 (2000).

> Inadequate technical sufficiency of the application and failure to present information to enable effective public review resulting in denial of due process.[370]

In Contention 6, which is similar to portions of Consolidated Petitioners' Contention D, the Oglala Sioux claims that NEPA, Reg. Guide 3.46, and NUREG-1569 are being violated because Powertech fails to present information in its Application in a concise, easily understandable manner.[371] Dr. Moran, whose declaration supports admission of this Contention, states that the information in the Application is "so disorganized and technically-deficient that it does not comply with the terms of NUREG-1569 . . . and should be revised."[372]

Both Powertech and the NRC Staff oppose admission of Contention 6. Powertech claims that it complied with all NRC guidance in its preparation of the Application, and that the Commission would not have accepted the Application for review if it were disorganized and technically inadequate.[373] Further, Powertech submits that many of Dr. Moran's claimed omissions are actually present in the Application, thereby rendering Contention 6 inadmissible because it fails to raise a material dispute with the Application, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).[374]

The NRC Staff argues that Contention 6 should be denied because the Oglala Sioux does not present a genuine dispute with the Application and fails to support its arguments, thereby failing to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).[375] Simply put, the NRC Staff's position is that the Oglala Sioux fails to support its claim that Powertech's Application violates NEPA or NUREG-1569 by being disorganized.[376] Indeed, the Staff maintains that the five examples of disorganization provided by Dr. Moran are not indicative of the readability of a 6000-plus-page document.[377]

As in Contention 5, the Oglala Sioux seeks to rebut the Staff's and Powertech's arguments against admissibility of Contention 6 by citing the fact that an RAI was issued by the Staff asking Powertech to furnish basic technical information that was lacking from the Application.[378] The Oglala Sioux maintains that this RAI is

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[370] Tribe Petition at 28.
[371] *Id.*
[372] *Id.* at 29.
[373] Powertech Answer to Tribe at 49.
[374] *Id.* at 50.
[375] Staff Answer to Tribe at 37.
[376] *Id.*
[377] *Id.* at 38.
[378] Tribe Reply at 33-34.

evidence of the fact that the Application did not present sufficient information to the public in a way that is understandable.[379]

The Board determines that the Tribe's Contention 6 inadmissible. The Tribe's argument that Powertech's Application is disorganized and, therefore, technically deficient, is not adequately supported, as the Tribe identifies only five instances in the entire Application where it claims disorganization presented an obstacle to their expert. The Board is also unaware of any legal precedent or any NRC regulations that require an application to meet any organizational criteria or else risk being classified as technically inadequate. Though the Tribe cites to the NEPA requirement that environmental documents "be written in plain language . . . so that decision-makers and the public can readily understand them,"[380] the Tribe has not shown how this requirement applies to the Applicant, as NEPA itself is binding only on the agency.[381]

Furthermore, as we noted relative to Consolidated Petitioners' Contention D above, issues of disorganization in an application cannot be said to be germane to this licensing proceeding. According to the Board in *HRI*, "[a]ny area of concern is germane if it is relevant to whether the license should be denied or conditioned."[382] The organization or coherence of an application was not considered by that Board to be germane because it was not an objection to the licensing action at issue in the proceeding.[383] In this contention, the Tribe has not raised a dispute with a specific portion of the Application that would lead this Board to question whether the license should be denied or conditioned. A general complaint about how the information is presented is not sufficient to raise a genuine dispute with the Application that is germane to the purpose of this licensing proceeding. Accordingly, the Tribe's Contention 6 is *not admitted.*

7. The Tribe's Contention 7

The Oglala Sioux states in Contention 7:

> Failure to include in the Application a reviewable plan for disposal of 11e2 Byproduct Material.[384]

The Oglala Sioux argues that Powertech's Application is deficient because plans for disposal of mill tailings "merely state that permanent disposal will occur"

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[379] *Id.* at 32-33.
[380] Tribe Petition at 29. *See also* 40 C.F.R. § 1502.8.
[381] 36 C.F.R. § 800.2(c)(2)(ii)(D).
[382] LBP-98-9, 47 NRC at 280.
[383] *Id.*
[384] Tribe Petition at 31.

and do not provide specifications for disposal, as is required by 10 C.F.R. Part 40, Appendix A.[385] The Oglala Sioux asserts that Powertech's Application should be rejected completely, without further inquiry, for this omission, as it allegedly violates NRC regulations and NEPA.[386] Under NEPA, the Oglala Sioux argues, an examination of all direct, indirect, and cumulative impacts of the proposed action must be executed.[387] According to the Oglala Sioux, Powertech's failure to identify the disposal facility or provide specifications for its disposal plans avoids this required examination, and the Application must therefore be rejected.[388]

Both Powertech and the NRC Staff oppose admission of Contention 7. Powertech argues that the Oglala Sioux mischaracterizes the requirements for a license application, and claims that Appendix A to Part 40 requires disposal of mill tailings at a licensed facility and does not require the information the Oglala Sioux is demanding.[389] Furthermore, Powertech asserts that the Application does provide a detailed discussion of offsite disposal of 11e(2) byproduct material, despite what the Oglala Sioux claims. Therefore, Powertech opposes admission of Contention 7 because it fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi).

The NRC Staff argues that Contention 7 fails to meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(iv) because the Oglala Sioux fails to identify an issue material to the findings the NRC must make in this licensing action.[390] The Staff maintains that 10 C.F.R. § 40.31(h) and Criterion 1 in Appendix A to Part 40, both cited by the Oglala Sioux in its Petition, do not require Powertech to provide more information than it has already provided in its Application.[391] Furthermore, the Staff asserts that NEPA does not require Powertech to be more specific about its disposal practices, mandating only "that the Staff consider the reasonably foreseeable environmental effects of the actions Powertech has proposed."[392] Therefore, according to the Staff, Contention 7 should be denied by the Board.

In its Reply, the Oglala Sioux argues that Powertech's and the NRC Staff's responses to Contention 7 are "contrary to facts known to Staff and Powertech and [are] contrary to established interpretations of NRC regulations."[393] The Oglala Sioux cites the issuance of an RAI by the NRC Staff as evidence that the

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[385] *Id.*
[386] *Id.*
[387] *Id.* at 33.
[388] *Id.*
[389] Powertech Answer to Tribe at 50-52.
[390] Staff Answer to Tribe at 39.
[391] *Id.* at 39-40.
[392] *Id.* at 40.
[393] Tribe Reply at 34.

information Powertech provided on 11e(2) byproduct material was incomplete to conduct the relevant analyses.[394] Further, the Oglala Sioux argues that the responses of Powertech and the NRC Staff establish that there is a genuine and material legal dispute with the Application because the Oglala Sioux disagrees with the NRC Staff's interpretation of 10 C.F.R. § 40.31(h) as not applying to in-situ facilities.[395] Finally, the Oglala Sioux argues that Powertech's and the NRC Staff's responses to Contention 7 address the merits of the contention and do not successfully dispute its admissibility in this proceeding.[396]

While we agree with the Tribe that the disposal of 11e(2) byproduct material is an issue that should be addressed more fully before a license is issued to Powertech, we do not agree the Tribe has shown that Powertech has, at this point in the proceeding, failed to comply with NRC or federal regulations. The Tribe points to 10 C.F.R. § 40.31(h) and Criterion 1 in Appendix A to Part 40 as support for its assertion that Powertech is required to include a specific plan for disposal of 11e(2) byproduct material in its Application. However, Commission precedent makes clear that 10 C.F.R. § 40.31(h) applies to uranium mills, and not to ISL facilities.[397] In fact, the Commission has held that, while Part 40 generally applies to ISL mining, Appendix A to Part 40, including Criterion 1, was "designed to address the problems related to mill tailings and not problems related to injection mining."[398] There are, however, certain safety provisions in Appendix A, such as Criterion 2, that are relevant and do apply to ISL mining.[399] Criterion 2, for instance, requires that "byproduct material from in situ extraction operations . . . must be disposed of at existing large mill tailings disposal sites . . . ."[400] Besides referring the Board to Appendix A, the Tribe has not identified a regulation that requires a disposal plan be included in an application. The Presiding Officer in *HRI* concluded that the principal regulatory standards for ISL applications are 10 C.F.R. § 40.32(c) and (d), "which mandate protection of public health and safety";[401] an exceedingly general requirement.

With regard to Part 40's applicability to ISL facilities, the NRC Staff often relies on guidance documents and license conditions when regulatory specificity

[394] *Id.* at 34-35.

[395] *Id.* at 35.

[396] *Id.* at 36.

[397] *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 8 (1999) (*HRI*).

[398] *Id.* (citing *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), LBP-99-1, 49 NRC 29, 33 (1999)).

[399] *Id.*

[400] 10 C.F.R. Part 40, App. A, Criterion 2.

[401] *HRI*, CLI-99-22, 50 NRC at 9.

is lacking.[402] At oral argument, the NRC Staff stated that it is standard practice, and consistent with NUREG-1569, to require the applicant either to supply a specific disposal plan or to implement a license condition that deals with waste disposal.[403] Because the Tribe has not pointed to any regulation that requires this plan to be in the Application itself, the Board finds it is appropriate to look to NRC guidance to determine how Powertech is to proceed. Because the NRC guidance allows Powertech to deal with the issue of waste disposal in one of two ways (i.e., in its Application or as a license condition), the fact that the information is not in the Application is not fatal to the Application, as the Tribe contends. Accordingly, the Tribe fails to raise a genuine dispute with the Application, in contravention of 10 C.F.R. § 2.309(f)(1)(vi).

The Tribe also argues that a specific disposal plan must be included in Powertech's Application in order to comply with NEPA. We do not agree. It is settled law that an applicant is not bound by NEPA, but by NRC regulations in Part 51.[404] The NRC Staff, however, is bound by NEPA. At oral argument, the Staff recognized this obligation and conceded that NEPA "would require possibly an analysis by the Staff"[405] regarding waste disposal. If, at the time the Staff issues its environmental documents, the SEIS does not include an analysis of waste disposal, or if the Tribe feels the analysis is inadequate, the Tribe may file a contention at that time under 10 C.F.R. § 2.309(f)(2). Contention 7 is *inadmissible*.

The Board does recognize, however, the importance of planning for waste disposal at any NRC-regulated facility, and we are concerned that this issue need not be addressed until the license is issued. At that point, of course, if a condition dealing with 11e(2) byproduct material is not included in the license, the Tribe has no recourse because it cannot challenge the license at that time. Due to these concerns, the Board recommends that this issue be considered by the Commission (or Board) when it conducts the mandatory review and hearing that must be held in this case.[406]

8. The Tribe's Contention 8

The Oglala Sioux states in Contention 8:

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[402] *Id.*

[403] Tr. at 242.

[404] *Levy County*, CLI-10-2, 71 NRC at 34.

[405] Tr. at 240.

[406] 10 C.F.R. § 51.107(a). *See also Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51, 112 (2009).

Requiring the Tribe to formulate contentions before an EIS is released violates NEPA.[407]

The Oglala Sioux contends that the NRC procedures requiring the Oglala Sioux to formulate contentions before the Staff's NEPA document, the SEIS, is complete violate the "public participation and informed decision-making mandates of NEPA."[408] The Oglala Sioux claims that it is being denied the benefit of a complete NEPA analysis under present NRC procedures and that the NRC's allowance of additional contentions to be filed after the SEIS is issued[409] wastes resources and denies the public the opportunity to participate in the agency's decisionmaking process.[410]

Both Powertech and the NRC Staff oppose admission of Contention 8. Powertech asserts that Contention 8 is an impermissible attack on NRC regulations, in violation of 10 C.F.R. § 2.335 and is therefore not a proper contention for this proceeding.[411] Furthermore, Powertech submits that the Oglala Sioux will have an opportunity to participate in the environmental review process by submitting comments when the NRC Staff issues the draft SEIS.[412] In sum, Powertech claims that the Oglala Sioux's Contention 8 is inadmissible as an impermissible attack on NRC regulations and that Oglala Sioux's claims of an exclusion from the environmental review process are unfounded.[413]

Like Powertech, the NRC Staff argues that Contention 8 is inadmissible as an impermissible attack on NRC regulations, in violation of 10 C.F.R. § 2.335.[414] Also, the Staff argues that the NRC's hearing procedures "provide substantial opportunities for public involvement *apart from* the hearing process," such as participating in the public comment period.[415]

In its Reply, the Oglala Sioux maintains that Contention 8 is not an attack on NRC regulations, as argued by Powertech and the NRC Staff.[416] Instead, the Oglala Sioux argues that the present proceeding fails to comply with the CEQ regulations, which they assert the NRC is bound to follow.[417] Further, the Oglala Sioux takes issue with the fact that the "NRC Staff has recommended that

[407] Tribe Petition at 34.
[408] *Id.* at 35.
[409] 10 C.F.R. § 2.309(f)(2).
[410] Tribe Petition at 36.
[411] Powertech Answer to Tribe at 54.
[412] *Id.* at 55.
[413] *Id.*
[414] Staff Answer to Tribe at 42.
[415] *Id.* (emphasis in original).
[416] Tribe Reply at 42.
[417] *Id.* at 43.

the Board make final rulings that prohibit admission of the Tribe's contentions, without the benefit of the required NEPA analysis."[418]

We agree with Powertech and the NRC Staff that Contention 8 is inadmissible. To begin, we note that the Oglala Sioux's main concern in this contention is that the NRC is not complying with CEQ regulations, which require that the NEPA process begin "at the earliest possible time."[419] As we understand it, the Tribe takes issue with the Commission's practice of requiring petitioners to file NEPA-based contentions contesting an applicant's ER, because the Staff's SEIS, the product of its NEPA review, is not ready at this stage of the proceeding. The Tribe argues that the NEPA review process is not conducted early enough in the proceeding to allow petitioners to file contentions on the completed SEIS, which is in violation of CEQ regulations. There are a number of reasons why the Board cannot accept this argument as the basis for an admissible contention.

First, while this agency gives substantial deference to CEQ regulations, it is not bound to follow them.[420] As an independent agency, the NRC has the authority to promulgate its own regulations implementing NEPA and is only bound by CEQ regulations when the NRC expressly adopts them.[421] The NRC has recognized its obligation to comply with NEPA, however, and has promulgated the regulations in Part 51, which govern "the consideration of the environmental impact of the licensing and regulatory actions of the agency."[422]

Secondly, Contention 8 constitutes an impermissible attack on NRC regulations, in contravention of 10 C.F.R. § 2.335. At oral argument, counsel for the Tribe stated that he was concerned with the way NRC's NEPA procedures were being used in the present proceeding, but conceded that he understood the Staff's NEPA review procedures are "not unique to this case."[423] Indeed, the regulations clearly state that a petitioner must file a NEPA contention challenging an applicant's ER *at the time the petitioner requests a hearing*.[424] Any challenge by the Tribe to this regulation is not litigable in this proceeding, and cannot be

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[418] *Id.* at 47.

[419] Tr. at 246.

[420] *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-19, 64 NRC 53, 62 n.3 (2006) (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 n.22 (2002)); *see also supra* note 275.

[421] *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-06-8, 63 NRC 241, 257 n.14 (2006); *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 154 (2005).

[422] *Limerick Ecology Action, Inc. v. NRC,* 869 F.2d 719, 725 (3d Cir. 1989).

[423] Tr. at 246.

[424] 10 C.F.R. § 2.309(f)(2) ("On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report.").

admitted as a contention under 10 C.F.R. § 2.335.[425] Absent a showing of "special circumstances" under 10 C.F.R. § 2.335(b), which the Tribe has not made, this matter must be addressed through Commission rulemaking.[426]

Finally, we do not agree with the Tribe that current NRC procedures for filing NEPA-related contentions violate "public participation and informed decision-making mandates of NEPA."[427] NRC regulations provide opportunities for public involvement in the NEPA review process. For example, in this case the NRC Staff has stated that a draft SEIS will be issued, and will be circulated for public comment before the final SEIS is issued.[428] Additionally, the regulations allow for new or amended contentions to be filed by the Tribe in the event that "there are data or conclusions in the NRC draft or final environmental impact statement . . . that differ significantly from the data or conclusions in the applicant's documents."[429] These new or amended contentions are not required to meet a higher standard than original contentions filed under 10 C.F.R. § 2.309(f)(1), as long as the new or amended contentions are founded on data or conclusions in the EIS that are new and significantly different from those in the ER and are timely filed.[430]

For the foregoing reasons, the Board concludes that the Tribe's Contention 8 is *inadmissible*.

9. The Tribe's Contention 9

The Oglala Sioux states in Contention 9:

> Failure to consider connected actions.[431]

The Oglala Sioux states that Powertech's proposed ISL project is being considered by multiple federal agencies besides the NRC.[432] For example, according to the Oglala Sioux, Powertech has applied to the Environmental Protection Agency

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[425] *See also Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-9, 71 NRC 245, 272 (2010); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 129 (2004).

[426] *North Anna*, LBP-04-18, 60 NRC at 270.

[427] Tribe Petition at 35.

[428] Staff Answer to Tribe at 42; Tr. at 248.

[429] 10 C.F.R. § 2.309(f)(2).

[430] The Board takes this opportunity to remind the NRC Staff of its increased notification commitments to Native American tribes as spelled out in the "U.S. Nuclear Regulatory Commission's Strategy for Outreach and Communication with Indian Tribes Potentially Affected by Uranium Recovery Sites" (ADAMS Accession No. ML092110101), especially as it pertains to environmental review.

[431] Tribe Petition at 36.

[432] *Id.*

(EPA) for a Class V deep injection well permit for injection of hazardous materials.[433] The Oglala Sioux argues that the NRC has failed to consider the actions that will be taken by other agencies in its review of Powertech's Application, in violation of NEPA.[434] The Oglala Sioux submits that the Class V permit process is a "connected action" and needs to be considered by the NRC under NEPA.[435] In the alternative, the Oglala Sioux argues that the Class V permit process must still be analyzed in the NRC's cumulative impact analysis.[436]

Both Powertech and the NRC Staff oppose admission of Contention 9. Powertech argues that the Oglala Sioux has failed to cite any regulations in 10 C.F.R. Part 51 that require the NRC Staff to coordinate its NEPA review of Powertech's Application with any other regulatory agency, such as the EPA.[437] Further, Powertech argues that the issue of underground injection of hazardous waste is wholly independent of NRC's review of Powertech's Application, because whether the EPA grants Powertech a Class V permit or not has no bearing on NRC Staff's s review.[438] Finally, Powertech asserts that Contention 9 is not ripe for consideration by the Board at this time because the NRC has only just begun to solicit EPA's input on the licensing of ISL facilities.[439]

Like Powertech, the NRC Staff argues that Contention 9 is not ripe for the Board's review at this time because the NRC Staff has not yet issued a draft or final SEIS for Powertech's proposed ISL facility.[440] According to the NRC Staff, because the Oglala Sioux is challenging NRC's ongoing NEPA review, Contention 9 must be rejected because it fails to comply with 10 C.F.R. § 2.309(f)(1)(vi).[441] Finally, the NRC Staff asserts that it will in fact be consulting with other agencies regarding Powertech's proposed action.[442]

In its Reply, the Oglala Sioux alleges that Powertech and the NRC Staff have provided no authority to rebut Contention 9.[443] The Oglala Sioux cites 10 C.F.R. § 51.10(b)(2) as requiring the participation of other agencies as cooperating agencies in the NEPA process.[444] As for ripeness, the Oglala Sioux argues that NEPA regulations require contentions to be pled at the earliest stages of a

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[433] *Id.* at 37.
[434] *Id.*
[435] *Id.*
[436] *Id.*
[437] Powertech Answer to Tribe at 56.
[438] *Id.* at 57.
[439] *Id.*
[440] Staff Answer to Tribe at 42.
[441] *Id.* at 43.
[442] *Id.*
[443] Tribe Reply at 47.
[444] *Id.*

proceeding, and the NRC Staff's SEIS will not be issued until the latter end of these proceedings, in violation of NEPA regulations.[445] Finally, the Oglala Sioux argues that Powertech is mistaken in its assertion that other agencies must request cooperating status from the NRC.[446] On the contrary, according to the Oglala Sioux, as lead agency the NRC must request participation at the earliest possible time in the review process.[447]

The Board agrees with Powertech and the NRC Staff that Contention 9 is inadmissible. We conclude that Contention 9 presents the same issues of prematurity found in the Tribe's Contention 1. In the context of the NEPA review process, the duty of the lead agency to consider the actions of other federal agencies involved in a licensing action, is the responsibility of the NRC and not of the applicant.[448] Accordingly, the issue raised in Contention 9 will not ripen until the NRC Staff has completed its NEPA review.[449] The Tribe, as well as the public, will be given an opportunity to comment on the NRC Staff's draft SEIS. Additionally, after the NRC Staff has issued its draft or final SEIS, the Tribe will have the opportunity to file new or amended contentions under 10 C.F.R. § 2.309(f)(2) if it believes the Staff has not properly carried out its consultation responsibility.[450] Accordingly, Contention 9 is *inadmissible.*

10. The Tribe's Contention 10

The Oglala Sioux states in Contention 10:

> The Environmental Report does not examine impacts of a direct tornado strike.[451]

The Oglala Sioux argues that CEQ guidelines require agencies in their NEPA analysis to "consider low-probability environmental impacts with catastrophic consequences, if those impacts are reasonably foreseeable."[452] The Oglala Sioux claims that tornado strikes are relatively common in the Black Hills region of South Dakota, but that Powertech has failed to consider the impact of these strikes in its Application.[453] The Oglala Sioux claims that an analysis of the impacts of a

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[445] *Id.* at 48.
[446] *Id.*
[447] *Id.*
[448] *Levy County,* CLI-10-2, 71 NRC at 34.
[449] *See, e.g., Crow Butte I,* CLI-09-12, 69 NRC at 566; *Crow Butte II,* CLI-09-9, 69 NRC at 351.
[450] *Crow Butte II,* CLI-09-9, 69 NRC at 351; Tr. at 254.
[451] Tribe Petition at 38.
[452] *Id.* (internal citations omitted).
[453] *Id.*

tornado strike must be considered by Powertech and the NRC Staff in its NEPA analysis in order to comply with federal regulations.[454]

Both Powertech and the NRC Staff oppose admission of Contention 10. First, Powertech points out that the CEQ guidelines are not binding on the NRC and that the Oglala Sioux has failed to identify any NRC regulations that would support its argument that Powertech's Application is inadequate.[455] Powertech also asserts that its Application does in fact include information on tornado strikes and concludes "that no design or operational changes would be required for an ISL facility, but that chemical storage tanks should be located far enough apart to prevent contact during a potential tornado."[456] Finally, Powertech argues that the Oglala Sioux's data regarding tornado strikes in the Black Hills area is irrelevant because the data actually refer to tornado strikes in Oklahoma.[457]

The NRC Staff argues that Contention 10 does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi) because Powertech's Application includes an analysis of tornado strikes and the Oglala Sioux does not challenge Powertech's analysis.[458] Further, the NRC Staff argues that Powertech is not required by law to address tornado strikes. It claims that the Oglala Sioux has not cited any NRC regulations that would require Powertech to include this type of analysis and argues that tornado strikes are not reasonably foreseeable, and therefore not required to be considered under NEPA.[459]

In its Reply, the Oglala Sioux rebuts the NRC Staff's claim that the threat of a tornado strike is "low" by stating that no fewer than nine tornadoes have struck Custer County and twenty-eight have struck Fall River County since 1950.[460] Moreover, the Oglala Sioux maintains that it did not rely on Oklahoma-based information for Contention 10, but merely cited Oklahoma tornado statistics to show that the Fansteel plant had been affected by a tornado, thereby making tornado strikes on facilities foreseeable.[461] Finally, the Oglala Sioux argues that Powertech's statement that the tornado-related information already in the Application is "good enough" provides evidence of a genuine dispute with the Application and supports admission of Contention 10.[462]

The Board determines that Contention 10 is inadmissible. Powertech has cited portions of its Application in which it discusses the possibility of a tornado strike

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[454] *Id.* at 39.
[455] Powertech Answer to Tribe at 58.
[456] *Id.*
[457] *Id.* at 59.
[458] Staff Answer to Tribe at 44.
[459] *Id.* at 44-45.
[460] Tribe Reply at 49.
[461] *Id.* at 50.
[462] *Id.*

and determined that no operational design changes would be necessary should such a strike occur.[463] The Tribe does not dispute this determination in Contention 10, stating merely that tornado strikes are reasonably foreseeable and not considered by Powertech in its Application. Because the Tribe does not challenge the analyses of tornado strikes that do appear in Powertech's Application, the Tribe does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi). Accordingly, the Board *denies* admission of Contention 10.

VI. SELECTION OF HEARING PROCEDURES

A. Legal Standards

As required by 10 C.F.R. § 2.310(a), upon admission of a contention in a licensing proceeding, the Board must identify the specific hearing procedures to be used to settle the contention. NRC regulations provide for a number of different hearing procedures, two of which are relevant here.[464] First, there is Subpart G,[465] which is mandated for certain proceedings,[466] and establishes NRC "Rules for Formal Adjudications," in which parties are permitted to "propound interrogatories, take depositions, and cross-examine witnesses without leave of the Board."[467] Second, there is Subpart L[468] which provides for more "informal" proceedings in which discovery is generally prohibited (except for (1) specified mandatory disclosures under 10 C.F.R. § 2.336(f), (a), and (b); and (2) the mandatory production of the hearing file under 10 C.F.R. § 2.1203(a)).[469] Under Subpart L, the Board has the primary responsibility for questioning the witnesses at any evidentiary hearing.[470]

B. Ruling

The Board concludes that, at this juncture, the Subpart L hearing procedures

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[463] Tr. at 272.

[464] If the hearing on a contention is "expected to take no more than two (2) days to complete," 10 C.F.R. § 2.310(h)(1), the Board can impose the Subpart N procedures for "Expedited Proceedings with Oral Hearings" specified at 10 C.F.R. § 2.1400-1407. These procedures are highly truncated, but may prove appropriate for certain contentions at a later stage.

[465] 10 C.F.R. Part 2.

[466] *See, e.g., id.* § 2.310(d).

[467] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131, 201-02 (2006).

[468] 10 C.F.R. Part 2.

[469] *Id.* § 2.1203(d).

[470] *Id.* § 2.1207(b)(6).

will be used to adjudicate each of the contentions we have admitted. We reach this result as follows. First, we conclude that there has been no showing under 10 C.F.R. § 2.310(d) that the Subpart G procedures are *mandated* for any of the admitted contentions. Second, exercising our discretion under 10 C.F.R. § 2.310(a), we have seen no reason or need to apply the Subpart G procedures to any of the admitted contentions. We therefore rule that, for the time being, the procedures of Subpart L will be used for the adjudication of each of the admitted contentions.[471] This determination is, of course, subject to reconsideration should there be reason to do so at a later date.

VII. CONCLUSION

Based on the foregoing, it is hereby ORDERED as follows:

A. Consolidated Petitioners Susan Henderson, Dayton Hyde, David Frankel, CWA, and ARM are admitted as parties in this proceeding, and a Subpart L hearing is granted with respect to the following contentions, as limited and reworded by the Licensing Board:

> Contention D — Powertech's presentation and analysis of baseline water quality data in its Application is inadequate. Further, Powertech's analysis of aquifer confinement fails to include an analysis of how artesian and horizontal flow could impact surrounding aquifers and surface waters.
>
> Contentions E (merged with J) — The lack of adequate confinement of the host Inyan Kara aquifer makes the proposed operation inimical to public health and safety in violation of section 40.31(d). Further, Applicant's failure to describe faults and fractures between aquifers, through which the groundwater can spread uranium, thorium, radium 226 and 228, arsenic, and other heavy metals, violates section 51.45(c) and (e).
>
> Contention K — The Application is not in conformance with 10 C.F.R. § 40.9 and 10 C.F.R. § 51.45 because the Application does not provide analyses that are adequate, accurate, and complete in all material respects to demonstrate that cultural and historic resources . . . are identified and protected pursuant to section 106 of the National Historic Preservation Act. As a result, the Application fails to comply with Section 51.60 . . . .

[471] The selection of hearing procedures for contentions at the outset of a proceeding is not immutable because, *inter alia*, the availability of Subpart G procedures under 10 C.F.R. § 2.310(d) depends critically on whether the credibility of eyewitnesses is important in resolving a contention, and witnesses relevant to each contention are not identified, under 10 C.F.R. § 2.336(a)(1), until *after* contentions are admitted. *See Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 272 (2007); *see also* 10 C.F.R. § 2.1402(b).

B. Consolidated Petitioners Gary Heckenlaible, Lilias Jones Jarding, and Theodore Ebert are denied party status in this proceeding. Further, the Board finds inadmissible the following contentions set forth by Consolidated Petitioners: Contentions A, B, C, F G, H, and I.

C. The Oglala Sioux Tribe is admitted as a party in this proceeding, and a Subpart L hearing is granted with respect to the following contentions, as limited and reworded by the Licensing Board:

> Contention 1 — Powertech's Application is deficient because it fails to address adequately protection of historical and cultural resources.
>
> Contention 2 — Failure to include necessary information for adequate determination of baseline ground water quality.
>
> Contention 3 — Failure to include adequate hydrogeological information to demonstrate ability to contain fluid migration.
>
> Contention 4 — Inadequate analysis of Ground Water Quantity Impacts.

D. The Board finds inadmissible the following contentions set forth by the Oglala Sioux Tribe: Contentions 5, 6, 7, 8, 9, and 10.

E. Within ten (10) days of the issuance of this Order, Petitioners David Frankel and Susan Henderson must elect to participate in this proceeding as individuals or to have their interests represented by CWA or ARM.

F. The Licensing Board will hold a telephone conference with the parties in which we will discuss a schedule of further proceedings in this matter.

G. This Order is subject to appeal to the Commission in accordance with the provisions of 10 C.F.R. § 2.311. Any petitions for review meeting applicable

requirements set forth in that section must be filed within ten (10) days of service of this Memorandum and Order.

THE ATOMIC SAFETY AND
LICENSING BOARD[472]

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Dr. Richard F. Cole
ADMINISTRATIVE JUDGE

Dr. Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
August 5, 2010

[472] Copies of this Memorandum and Order were sent this date by the agency's E-Filing system to the counsel/representatives for (1) Powertech USA, Inc.; (2) Consolidated Petitioners; (3) the Oglala Sioux Tribe; and (4) NRC Staff.

APPENDIX A
Contention I — Basis-by-Basis Analysis

Basis	Subparts of 10 C.F.R. § 2.309(f)(1) not met	Element(s) not met
Basis 1	(v), (vi)	Failure to provide support and no genuine dispute
Basis 2	(vi)	No genuine dispute
Basis 3	(v), (vi)	Failure to provide support and no genuine dispute
Basis 4	(v), (vi)	Failure to provide support and no genuine dispute
Basis 5	(v), (vi)	Failure to provide support and no genuine dispute
Basis 6	(v)	Failure to provide support
Basis 7	(v), (vi)	Failure to provide support and no genuine dispute
Basis 8	(v), (vi)	Failure to provide support and no genuine dispute
Basis 9	(v), (vi)	Failure to provide support and no genuine dispute
Basis 10	(v)	Failure to provide support
Basis 11	(v), (vi)	Failure to provide support and no genuine dispute
Basis 12	(iv), (v), (vi)	Not shown as material, failure to provide support, and no genuine dispute
Basis 13	(v), (vi)	Failure to provide support and no genuine dispute
Basis 14	(v), (vi)	No genuine dispute and failure to provide support
Basis 15	(iii), (v), (vi)	Outside the scope of the proceeding, failure to provide support, and no genuine dispute
Basis 16	(v), (vi)	Failure to provide support and no genuine dispute
Basis 17	(v), (vi)	Failure to provide support and no genuine dispute
Basis 18	(v), (vi)	Failure to provide support and no genuine dispute

Basis	Subparts of 10 C.F.R. § 2.309(f)(1) not met	Element(s) not met
Basis 19	(v), (vi)	Failure to provide support and no genuine dispute
Basis 20	(v), (vi)	Failure to provide support and no genuine dispute
Basis 21	(iv), (v), (vi)	Not shown as material, failure to provide support, and no genuine dispute
Basis 22	(iv), (v), (vi)	Not shown as material, failure to provide support and no genuine dispute
Basis 23	(v), (vi)	Failure to provide support and no genuine dispute
Basis 24	(v), (vi)	Failure to provide support and no genuine dispute
Basis 25	(v), (vi)	Failure to provide support and no genuine dispute
Basis 26	(v), (vi)	Failure to provide support and no genuine dispute
Basis 27	(v), (vi)	Failure to provide support and no genuine dispute
Basis 28	(v), (vi)	Failure to provide support and no genuine dispute
Basis 29	(v), (vi)	Failure to provide support and no genuine dispute
Basis 30	(v), (vi)	Failure to provide support and no genuine dispute
Basis 31	(v), (vi)	Failure to provide support and no genuine dispute
Basis 32	(v), (vi)	Failure to provide support and no genuine dispute
Basis 33	(vi)	No genuine dispute
Basis 34	(vi)	No genuine dispute
Basis 35	(iv), (v), (vi)	Not shown to be material, failure to provide support, and no genuine dispute
Basis 36	(v), (vi)	Failure to provide support and no genuine dispute
Basis 37	(v), (vi)	Failure to provide support and no genuine dispute
Basis 38	(v), (vi)	Failure to provide support and no genuine dispute

Basis	Subparts of 10 C.F.R. § 2.309(f)(1) not met	Element(s) not met
Basis 39	(v), (vi)	Failure to provide support and no genuine dispute
Basis 40	(v), (vi)	Failure to provide support and no genuine dispute
Basis 41	(v), (vi)	Failure to provide support and no genuine dispute
Basis 42	(v), (vi)	Failure to provide support and no genuine dispute
Basis 43	(v), (vi)	Failure to provide support and no genuine dispute
Basis 44	(v), (vi)	Failure to provide support and no genuine dispute
Basis 45	(v), (vi)	Failure to provide support and no genuine dispute
Basis 46	(v), (vi)	Failure to provide support and no genuine dispute
Basis 47	(v), (vi)	Failure to provide support and no genuine dispute
Basis 48	(v), (vi)	Failure to provide support and no genuine dispute
Basis 49	(v)	Failure to provide support
Basis 50	(i), (iv), (v), (vi)	Not shown to be material, failure to provide support, no genuine dispute, and failure to raise an issue of law or fact
Basis 51	(v), (vi)	Failure to provide support and no genuine dispute
Basis 52	(v), (vi)	Failure to provide support and no genuine dispute
Basis 53	(v), (vi)	Failure to provide support and no genuine dispute
Basis 54	(v), (vi)	Failure to provide support and no genuine dispute
Basis 55	(v), (vi)	Failure to provide support and no genuine dispute
Basis 56	(v), (vi)	Failure to provide support and no genuine dispute
Basis 57	(v), (vi)	Failure to provide support and no genuine dispute

Basis	Subparts of 10 C.F.R. § 2.309(f)(1) not met	Element(s) not met
Basis 58	(iii), (v), (vi)	Not within the scope of the proceeding, failure to provide support, and no genuine dispute
Basis 59	(v)	Failure to provide support
Basis 60	(v), (vi)	Failure to provide support and no genuine dispute
Basis 61	(v)	Failure to provide support
Basis 62	(v)	Failure to provide support
Basis 63	(v)	Failure to provide support
Basis 64	(v)	Failure to provide support
Basis 65	(v), (vi)	Failure to provide support and no genuine dispute
Basis 66	(v)	Failure to provide support
Basis 67	(iv), (v), (vi)	Not shown to be material, failure to provide support, and no genuine dispute
Basis 68	(v), (vi)	Failure to provide support and no genuine dispute
Basis 69	(v), (vi)	Failure to provide support and no genuine dispute
Basis 70	(v), (vi)	Failure to provide support and no genuine dispute
Basis 71	(vi)	No genuine dispute
Basis 72	(iv), (v), (vi)	Not shown to be material, failure to provide support, and no genuine dispute
Basis 73	(v), (vi)	Failure to provide support and no genuine dispute
Basis 74	(v)	Fail to provide support
Basis 75	(v), (vi)	Failure to provide support and no genuine dispute
Basis 76	(v)	Failure to provide support
Basis 77	(v)	Failure to provide support
Basis 78	(v), (vi)	Failure to provide support and no genuine dispute
Basis 79	(v), (vi)	Failure to provide support and no genuine dispute
Basis 80	(v), (vi)	Failure to provide support and no genuine dispute
Basis 81	(v)	Failure to provide support

Basis	Subparts of 10 C.F.R. § 2.309(f)(1) not met	Element(s) not met
Basis 82	(v), (vi)	Failure to provide support and no genuine dispute
Basis 83	(v), (vi)	Failure to provide support and no genuine dispute
Basis 84	(v), (vi)	Failure to provide support and no genuine dispute
Basis 85	(v), (vi)	Failure to provide support and no genuine dispute
Basis 86	(v), (vi)	Failure to provide support and no genuine dispute
Basis 87	(v), (vi)	Failure to provide support and no genuine dispute
Basis 88	(iv), (v), (vi)	Not shown to be material, failure to provide support, and no genuine dispute
Basis 89	(v), (vi)	Failure to provide support and no genuine dispute
Basis 90	(v), (vi)	Failure to provide support and no genuine dispute
Basis 91	(v)	Failure to provide support
Basis 92	(iv), (v)	Not shown to be material and failure to provide support
Basis 93	(v), (vi)	Failure to provide support and no genuine dispute
Basis 94	(v), (vi)	Failure to provide support and no genuine dispute
Basis 95	(iv), (v), (vi)	Not shown to be material, failure to provide support, and no genuine dispute
Basis 96	(v), (vi)	Failure to provide support and no genuine dispute
Basis 97	(v), (vi)	Failure to provide support and no genuine dispute
Basis 98	(v), (vi)	Failure to provide support and no genuine dispute
Basis 99	(v), (vi)	Failure to provide support and no genuine dispute
Basis 100	(v), (vi)	Failure to provide support and no genuine dispute

Cite as 78 NRC 37 (2013) **LBP-13-9**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Richard F. Cole
Dr. Mark O. Barnett

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium Recovery Facility) **July 22, 2013**

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

To be admissible, like a contention that is submitted with an initial hearing request, a post-hearing petition contention, i.e., a new or amended contention, also must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (NEPA MIGRATION TENET)

Admitted contentions challenging an applicant's Environmental Report may, in appropriate circumstances, function as challenges to similar portions of the Staff's Environmental Impact Statement. This "migration tenet" applies when "the information in the DEIS is sufficiently similar to the information in the ER." *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011). In this circumstance, a party need not file

a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the DEIS.

RULES OF PRACTICE: CONTENTIONS (NEPA MIGRATION TENET)

The migration tenet is appropriate only so long as the DEIS analysis or discussion at issue is essentially *in para materia* with the ER analysis or discussion that is the focus of the contention.

RULES OF PRACTICE: CONTENTIONS (NEPA MIGRATION TENET)

If the "new" contention raises the same concern admitted at the initial stage of the proceeding, its admissibility need not be relitigated and redecided at each step of the NEPA process, namely the issuances of the DSEIS and the FSEIS.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION; CONTENTION OF ADEQUACY)

There are two primary types of contentions — contentions of omission and contentions of adequacy. "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 n.53 (2011). Based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

An admitted contention of omission may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the alleged omission.

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; TIMELINESS)

Until the DSEIS is issued, the intervenors have no way to know in what form or manner, if any, the NRC Staff will use information from an RAI response. As a

consequence, the intervenors can only file their contentions when the information appears in or is omitted from the DSEIS. It would be patently unreasonable to require an intervenor, or a potential intervenor, to divine what use the information collected by the NRC Staff will or will not serve in the DSEIS.

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; TIMELINESS)

Intervenors and potential intervenors have a period of time to file new or amended contentions in response to a DSEIS. They are not required to file their contentions on information or studies that are published in the period between the date for initial contentions and the date the DSEIS is published.

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; TIMELINESS)

Intervenors cannot be expected to raise a claim each time a document is created relating to a proceeding, especially if that document is a mere part of a larger, arguably incomplete, process. The Board does not expect intervenors to raise a concern regarding each portion of the process, but instead notes that intervenors need not file a contention until all relevant parts of a process are completed.

NEPA: ENVIRONMENTAL IMPACT STATEMENT (RECIRCULATION FOR COMMENTS)

The NRC Staff need not recirculate a supplemental NEPA document every time new information becomes available. Recirculation is required only when the information presents a "seriously different picture of the environmental impacts." *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999).

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MEMORANDUM AND ORDER
(Ruling on Proposed Contentions Related to the Draft Supplemental Environmental Impact Statement)

I. INTRODUCTION

On August 5, 2010, the Board in the above-captioned matter ruled on two petitions to intervene and requests for hearing.[1] The Board admitted the Oglala Sioux Tribe and the then-designated Consolidated Petitioners[2] as intervenors in this proceeding challenging the application of Powertech (USA), Inc. ("Powertech" or "Applicant") to construct and operate an in-situ leach uranium recovery (ISR) facility in Custer and Fall River Counties, South Dakota.[3] The Board also admitted a total of seven contentions proposed by the Oglala Sioux Tribe and the Consolidated Intervenors.[4]

On November 15, 2012, the Nuclear Regulatory Commission Staff (NRC Staff) notified the Board of the public availability of its Draft Supplemental

[1] LBP-10-16, 72 NRC 361 (2010).

[2] Although originally called the Consolidated Petitioners, the Board now refers to Susan Henderson, Dayton Hyde, and Aligning for Responsible Mining (ARM) as the Consolidated Intervenors.

[3] LBP-10-16, 72 NRC at 380-93.

[4] *Id.* at 443-44.

Environmental Impact Statement (DSEIS) prepared pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, and the agency's implementing regulations, 10 C.F.R. Part 51.[5] On January 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors filed proposed contentions relating to the DSEIS.[6] On March 7, 2013, NRC Staff filed its response to the proposed contentions,[7] followed on March 11, 2013, by the Powertech response.[8] On March 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors submitted replies in support of their respective motions for new contentions.[9]

In this Memorandum and Order, the Board concludes that three new contentions proposed in response to the DSEIS are admissible, seven contentions are admissible because of the migration tenet, and the balance of the proposed contentions are inadmissible.

II. BACKGROUND

The background of this case has been set forth in detail in the Board's August 5, 2010, opinion.[10] In that opinion and order, the Board first determined that the Oglala Sioux Tribe and the Consolidated Intervenors had standing to pursue their claims.[11] Additionally, the Board considered whether ten proposed contentions from the Oglala Sioux Tribe and nine proposed contentions from the Consolidated Intervenors met the contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1). In so doing, the Board admitted seven contentions, four proffered by the Oglala Sioux Tribe and three proffered by the Consolidated Intervenors.

As outlined in the Board's 2010 decision, the previously admitted contentions are as follows:

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[5] Letter to Administrative Judges Froehlich, Cole, and Barnett, from Patricia Jehle, Counsel for NRC Staff (Nov. 15, 2012) (ADAMS Accession No. ML12320A623); *see* Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, NUREG-1910 (Supp. 4, Nov. 2012) (ADAMS Accession No. ML12312A040) [hereinafter DSEIS].

[6] *See* List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013) [hereinafter Oglala Sioux Tribe's Proposed Contentions]; Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013) [hereinafter Consolidated Intervenors' Proposed Contentions].

[7] NRC Staff's Answer to Contentions on [DSEIS] (Mar. 7, 2013) [hereinafter Staff's Answer].

[8] Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for a Hearing/Petition for Intervention (Mar. 11, 2013) [hereinafter Powertech's Response].

[9] Consolidated Intervenors' Consolidated Reply Re: DSEIS (Mar. 25, 2013) [hereinafter Consolidated Intervenors' Reply]; Consolidated Reply of the Oglala Sioux Tribe (Mar. 25, 2013) [hereinafter Oglala Sioux Tribe's Reply].

[10] *See* LBP-10-16, 72 NRC at 376-80.

[11] *Id.* at 380-93.

For the Oglala Sioux Tribe —

Contention 1 — Powertech's Application is deficient because it fails to address adequately protection of historical and cultural resources.

Contention 2 — Failure to include necessary information for adequate determination of baseline ground water quality.

Contention 3 — Failure to include adequate hydrogeological information to demonstrate ability to contain fluid migration.

Contention 4 — Inadequate analysis of Ground Water Quantity Impacts.

For the Consolidated Intervenors —

Contention D — Powertech's presentation and analysis of baseline water quality data in its Application is inadequate. Further, Powertech's analysis of aquifer confinement fails to include an analysis of how artesian and horizontal flow could impact surrounding aquifers and surface waters.

Contention E (merged with J) — The lack of adequate confinement of the host Inyan Kara aquifer makes the proposed operation inimical to public health and safety in violation of section 40.31(d). Further, Applicant's failure to describe faults and fractures between aquifers, through which the groundwater can spread uranium, thorium, radium 226 and 228, arsenic, and other heavy metals, violates section 51.45(c) and (e).

Contention K — The Application is not in conformance with 10 C.F.R. § 40.9 and 10 C.F.R. § 51.45 because the Application does not provide analyses that are adequate, accurate, and complete in all material respects to demonstrate that cultural and historic resources . . . are identified and protected pursuant to section 106 of the National Historic Preservation Act. As a result, the Application fails to comply with Section 51.60 . . . .[12]

In its analysis of contention admissibility, the Board denied several of the Oglala Sioux Tribe's and the Consolidated Intervenors' proposed contentions for their failure to meet the contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1).[13] The Board rejected some of the proposed contentions because they

[12] *Id.* at 443-44.

[13] *See infra* Part III.A for the contention admissibility standards.

were unsupported,[14] some because they were premature,[15] and some because they were outside the scope of the licensing proceeding.[16]

After the issuance of the Board's 2010 decision, which neither Powertech nor the NRC Staff challenged on appeal before the Commission, the Board held two prehearing conference calls with the parties regarding administrative matters.[17] As stated, the DSEIS was made public in November 2012 and both the Oglala Sioux Tribe and Consolidated Intervenors filed proposed new contentions based on the DSEIS. Now before the Board is the question of the admissibility of these parties' proposed new contentions.

III. LEGAL STANDARDS

A. New and Amended Contentions

To be admissible, like a contention that is submitted with an initial hearing request, a post-hearing petition contention, i.e., a new or amended contention, also must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1), namely the contention must

> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
> (ii) Provide a brief explanation of the basis for the contention;
> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
> (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue . . . ; [and]
> (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.[18]

Additionally, pursuant to 10 C.F.R. § 2.309(c),[19] if a party submits a proposed

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[14] *See* LBP-10-16, 72 NRC at 395-400, 407-08, 409-11, 440-42 (rejecting Consolidated Intervenors' Contentions A, B, C, F, H, and Oglala Sioux Tribe's Contention 10).

[15] *See id.* at 419-22, 438-40 (discussing Oglala Sioux Tribe's Contention 9 and a portion of Oglala Sioux Tribe's Contention 1).

[16] *See id.* at 408-09, 428-38 (discussing Consolidated Intervenors' Contention G and Oglala Sioux Tribe's Contentions 5, 6, 7, and 8).

[17] *See* Tr. at 410, 478.

[18] 10 C.F.R. § 2.309(f)(1).

[19] The current section 2.309(c) was established by 77 Fed. Reg. 46,561 and officially enacted on September 4, 2012. *See* 77 Fed. Reg. 46,561 (Aug. 3, 2012). In its October 16, 2012,

(Continued)

contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing petition, it "will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause."[20] Good cause exists when "(i) [t]he information upon which the filing is based was not previously available; (ii) [t]he information upon which the filing is based is materially different from information previously available; and (iii) [t]he filing has been submitted in a timely fashion based on the availability of the subsequent information."[21]

If the reason a motion to admit a new or amended contention was filed after the deadline does not relate to the substance of the filing itself, the standard contained in 10 C.F.R. § 2.307 applies in determining whether the motion can be considered timely.[22] Section 2.307 provides that a filing deadline "may be extended or shortened either by the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer."[23] Good cause in this section is not explicitly defined.[24] Therefore, to be admissible at this stage, a contention must not only meet contention admissibility standards of section 2.309(f)(1), but must also satisfy the timeliness requirements of section 2.309(c) or section 2.307.

B. Migration Tenet

Admitted contentions challenging an applicant's Environmental Report (ER) may, in appropriate circumstances, function as challenges to similar portions of the Staff's Environmental Impact Statement.[25] This "migration tenet" applies when "the information in the DEIS is sufficiently similar to the information in the

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Order memorializing the Board's October 4, 2012, conference call with the parties and establishing a supplemental initial scheduling order, the Board determined that the standards set forth in the now-current section 2.309(c) would apply to new or amended contentions submitted after the applicable deadline although this section's current language was not in place at the start of this proceeding. Licensing Board Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) at 4 (Oct. 16, 2012).

[20] 10 C.F.R. § 2.309(c).

[21] *Id.*

[22] 10 C.F.R. § 2.309(c)(2).

[23] 10 C.F.R. § 2.307(a).

[24] 77 Fed. Reg. at 46,571 ("The NRC notes that 'good cause' in § 2.307 does not share the same definition that is used for 'good cause' in final § 2.309(c) . . . ."). The *Federal Register* notice provides health issues or an unexpected weather event as examples of reasons that might constitute good cause for purposes of requesting an extension under section 2.307. *Id.*

[25] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001); *see Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998).

ER."[26] In this circumstance, a party need not file a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the DEIS.[27] This is appropriate, however, only so long as the DEIS analysis or discussion at issue is essentially *in para materia* with the ER analysis or discussion that is the focus of the contention. Alternatively, an intervenor attempting to litigate an issue based on expressed concerns about the DEIS may need to amend the admitted contention or submit a new contention if the information in the DEIS is sufficiently different from the information in the ER that supported the original contention's admission.[28] A new or amended contention related to portions of the DEIS that differ from the ER must be timely filed under section 2.309(c), and meet the contention admissibility standards of section 2.309(f)(1) to be admitted.[29]

C. Contentions of Omission or Adequacy

There are two primary types of contentions — contentions of omission and contentions of adequacy.[30] "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application."[31] Based on its language, a contention can

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[26] *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011); *accord Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63-64 (2008).

[27] *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 470-71 (2012) ("The Board may construe an admitted contention contesting the ER as a challenge to a subsequently issued DEIS or FEIS without the necessity for Intervenors to file a new or amended contention.").

[28] *Vogtle ESP Site,* LBP-08-2, 67 NRC at 63-64.

[29] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002) ("While a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, *new* claims must be raised in a new or amended contention."); *Vogtle ESP Site,* LBP-08-2, 67 NRC at 64 (explaining that, if the portion of the ER that an admitted contention challenges is not sufficiently similar to the DEIS, "an intervenor attempting to litigate an issue based on expressed concerns about the DEIS may need to amend the admitted contention or, if the information in the DEIS is sufficiently different from that in the ER that supported the contention's admission, submit a new contention").

[30] *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 (2011); *see, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 442 (2011) (discussing whether a contention should properly be characterized as a contention of omission or a contention of adequacy and the ramifications of such a designation with regard to contention admissibility).

[31] *Turkey Point,* LBP-11-6, 73 NRC at 200 n.53; *accord McGuire/Catawba,* CLI-02-28, 56 NRC at 382-83 ("There is, in short, a difference between contentions that merely allege an 'omission' of

(Continued)

be characterized as a contention of omission, a contention of adequacy, or both.[32] An admitted contention of omission may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the alleged omission.[33] In this circumstance, the party that filed the original contention of omission must file a new or amended contention if it wishes to challenge the adequacy or sufficiency of the NRC Staff's treatment of the relevant issue.[34] That new or amended contention must be timely filed and must meet the contention admissibility standards. Generalized grievances with the sufficiency of the NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility.[35]

IV. DISCUSSION

A. The Oglala Sioux Tribe's Proposed Contention 1: "Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources, and Failure to Involve or Consult the Oglala Sioux Tribe as Required by Federal Law"

1. Positions of the Parties

The Oglala Sioux Tribe's proposed new Contention 1 is nearly identical to Consolidated Intervenors' proposed new Contention A. Contention 1 alleges the DSEIS's "failure to meet applicable legal requirements regarding protection of historical and cultural resources, and failure to involve or consult the Oglala Sioux Tribe as required by federal law."[36] The Oglala Sioux Tribe contends that the proposed site has not yet been adequately surveyed with regard to its potential cultural resources, which renders premature the DSEIS's determination

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information and those that challenge substantively and specifically how particular information has been discussed in a license application.").

[32] *McGuire/Catawba,* CLI-02-28, 56 NRC at 383 n.45; *see Turkey Point,* LBP-11-6, 73 NRC at 199-200.

[33] *McGuire/Catawba,* CLI-02-28, 56 NRC at 383 ("Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.").

[34] *Id.*

[35] *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 23 (2007); *Shieldalloy Metallurgical Corp.* (Amendment Request for Decommissioning of the Newfield, New Jersey Facility), LBP-07-5, 65 NRC 341, 352 (2007) ("'[T]he contention rule is strict by design' and does 'not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support.'" (footnotes omitted)); *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007).

[36] Oglala Sioux Tribe's Proposed Contentions at 4.

that impacts resulting from the site's operation are "small."[37] Additionally, the Oglala Sioux Tribe contends that the NRC Staff has not engaged in the required National Historic Preservation Act (NHPA) consultation process with a number of tribes that have an interest in the proposed site.[38]

In response to this contention, the NRC Staff asserts that the contention is not based on any new or materially different information and is, therefore, not timely pursuant to 10 C.F.R. § 2.309(c). Additionally, the NRC Staff notes that the results of an additional survey being conducted by the NRC Staff may be challenged at a later date, if appropriate.[39]

Powertech takes the same stance as the NRC Staff in its response to the Oglala Sioux Tribe's contention. It argues that the contention does not satisfy the requirements for new and amended contentions set out in secction 2.309(c).[40] It maintains that, to be considered timely, the contention should have been filed well before January 25, 2013.[41] Additionally, Powertech contends that the portion of the Oglala Sioux Tribe's contention alleging inadequate surveying related to cultural resources is not yet ripe because the section 106 process, which provides a federally recognized Indian tribe with a procedural right to protect its interest in cultural resources,[42] is not yet complete.[43] When that process is complete, Powertech states that the Oglala Sioux Tribe may submit a new or amended contention, if appropriate.[44]

In its reply to the NRC Staff's and Powertech's arguments, the Oglala Sioux Tribe points out that the Board, in its August 5, 2010, Order that granted the petitions to intervene and requests for hearing, found that the Oglala Sioux Tribe's NHPA and NEPA contentions were not ripe because it is the duty of the Staff, not the applicant, to consult with interested tribes concerning the proposed site.[45] The Oglala Sioux Tribe now argues that the contention is admissible because the DSEIS, which should reflect those Staff obligations, has been issued.[46]

The Oglala Sioux Tribe also rejects the arguments that it should wait to file contentions related to cultural surveys until future planned surveys have been completed. It asserts that the Staff "should not be able to pre-emptively 'moot'

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[37] *Id.* at 5.
[38] *Id.* at 5-6.
[39] Staff's Answer at 12-13.
[40] Powertech's Response at 12.
[41] *Id.* at 12.
[42] National Historic Preservation Act § 106, 16 U.S.C. § 470.
[43] Powertech's Response at 13.
[44] *Id.*
[45] Oglala Sioux Tribe's Reply at 4.
[46] *Id.*

an otherwise admissible contention based on actions that it has not yet taken."[47] Further, it contends that the Staff's arguments inappropriately focus on the merits of the Oglala Sioux Tribe's contentions, rather than their admissibility pursuant to the standards set forth in 10 C.F.R. § 2.309(f)(1).[48]

Finally, the Oglala Sioux Tribe argues that its Contention 1 should not be found inadmissible for failing to be based on new or materially different information.[49] The Oglala Sioux Tribe declares that it raised an admissible contention in relation to the application that is similar to the one it currently proposes and no subsequent research or information has been released that alters the basis of its previously admitted contention.[50] Accordingly, the Oglala Sioux Tribe reasons that "the same sufficient information that formed the basis of Powertech's inadequate application materials now forms an inadequate basis for the NRC Staff's analysis in the DSEIS."[51]

2. Board Ruling

The Oglala Sioux Tribe's proposed Contention 1 is nearly identical to Consolidated Intervenors' proposed Contention A. Both allege a failure to protect historical and cultural resources and a failure to involve or consult with affected Native American tribes.

These concerns (protection of cultural and historical resources and adequacy of consultation) have already been addressed in this proceeding. The Board in LBP-10-16 admitted two contentions that question the adequacy of the protection of historic and cultural resources.[52] With the issuance of the DSEIS, these concerns about the protection of historic and cultural resources have "migrated" because this previously admitted issue now appears in relation to information in the DSEIS. Strictly speaking, the Oglala Sioux Tribe and the Consolidated Intervenors did not need to refile their respective Contentions 1 and A after the issuance of the DSEIS because no further information addressing the expressed concerns of the Oglala Sioux Tribe or the Consolidated Intervenors about the adequacy of the existing cultural resources surveys has been generated by the Staff. Moreover, in accordance with its authority to consolidate party contentions and presentations under section 2.316, the Board will combine these four iterations (two filed in response to the ER and two filed in response to the DSEIS) into a single contention

[47] *Id.* at 5.
[48] *Id.* at 6.
[49] *Id.*
[50] *Id.*
[51] *Id.*
[52] LBP-10-16, 72 NRC at 419-22.

addressing the protection of historic and cultural resources, the terms of which are set forth in Appendix A to this opinion.[53]

The issue of the adequacy of the consultation process with interested tribes was also addressed in 2010 in LBP-10-16. There the Board held that "the issue of the alleged failure to consult with the Tribe . . . is material and within the scope of this proceeding."[54] The Board further found that this portion of the contention was not yet ripe and directed the Oglala Sioux Tribe "to wait until the [DSEIS] is issued by the NRC Staff to interpose the issue of the adequacy of the agency's consultation efforts."[55] Both the Oglala Sioux Tribe and Consolidated Intervenors have now timely raised the lingering issue of the adequacy of the NRC's consultation process with the Native American tribes.

Although the NRC Staff notes that it "continues to work to resolve any remaining disagreements among the consulting parties," such actions do not moot this contention. It is apparent that, notwithstanding the issuance of the DSEIS, this process has not been completed and the intervenors are alleging only that the scope of the ongoing consultation process is inadequate.

As a consequence, the prior ripeness issue is no longer a bar to this contention. Additionally, the contention is supported by a showing sufficient to meet the contention admissibility requirements of section 2.309(f)(1), and it is timely in accord with section 2.309(c)(2). Consequently, pursuant to the Board's authority under section 2.316, the consultation portions of Contention 1 and Contention A questioning the adequacy of the Staff's consultation efforts with Native American tribes as required by 36 C.F.R. § 800.2(c)(2)(ii)(D) are admitted and are consolidated into one issue statement, Contention 1B.

B. The Oglala Sioux Tribe's Proposed Contention 2: "The DSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality"

1. Positions of the Parties

The Oglala Sioux Tribe's proposed Contention 2 is identical to Consolidated Intervenors' proposed Contention B — "The DSEIS fails to include neces-

[53] A contention alleging a failure to protect historic and cultural resources was similarly admitted in the pending Crow Butte Marsland and Crow Butte Renewal proceedings. *See Crow Butte Resources, Inc.* (Marsland Expansion Area), LBP-13-6, 77 NRC 253, 286-88 (2013); *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-08-24, 68 NRC 691, 719-24 (2008).

[54] LBP-10-16, 72 NRC at 422; *see Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 350-51 (2009) (discussing the Board's ruling that tribal consultation is within the scope of the proceeding).

[55] LBP-10-16, 72 NRC at 422.

sary information for adequate determination of baseline groundwater quality."[56] Like Consolidated Intervenors, the Oglala Sioux Tribe contends that the DSEIS contravenes NRC regulations, NUREG provisions providing Staff regulatory guidance, and NEPA because "it fails to provide an adequate baseline groundwater characterization or demonstrate that ground water samples were collected in a scientifically defensible manner, using proper sample methodologies."[57] The Oglala Sioux Tribe argues that baseline conditions are mandated by statute and regulation, and that the DSEIS is inadequate because it fails to include a proper analysis of the required baselines with respect to groundwater quality.[58]

To support this contention, the Oglala Sioux Tribe relies on the supplemental declaration of Dr. Robert Moran as well as a memorandum from Dr. Richard Abitz.[59] It also points to specific areas in the DSEIS that it claims "admit[ ] that substantial water quality data collection will only be conducted after license issuance."[60] In addition, the Oglala Sioux Tribe asserts these portions of the DSEIS lack a scientific basis because they "rely on Powertech's decision to only consider, review, and proposed [sic] monitoring (both quality and quantity) for groundwater wells within 2 [kilometer] of the proposed mining area."[61] The 2-kilometer figure, the Oglala Sioux Tribe notes, is from NRC Regulatory Guide 4.14, which "was drafted over 30 years ago, in 1980 — and not updated since."[62] Because of its age and because it "applies exclusively to conventional uranium mills — and contains no analysis or guidance premised upon any review of in-situ leach uranium mining activities," the Oglala Sioux Tribe argues that the DSEIS's reliance on Regulatory Guide 4.14 is "not justified."[63] For these reasons, the Oglala Sioux Tribe argues that Contention 2 should be admitted.

In responding to these assertions by the Oglala Sioux Tribe, the NRC Staff makes essentially the same arguments for inadmissibility as it does in response to the arguments of Consolidated Intervenors in support of their Contention B. Specifically, the NRC Staff declares that the contention is not based on any new or materially different information and, therefore, does not conform to the standards for new or amended contentions set forth in 10 C.F.R. § 2.309(c).[64] It also argues

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[56] Oglala Sioux Tribe's Proposed Contentions at 10.

[57] *Id.* at 10-11.

[58] *Id.* at 12 (citing *Half Moon Bay Fisherman's Marketing Association v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988)) ("The establishment of baseline conditions of the affected environment is a fundamental requirement of the NEPA process.").

[59] *Id.* at 11, 13.

[60] *Id.* at 14 (citing DSEIS at 2-16, 7-8, 7-14, 7-17).

[61] *Id.* at 14 (citing DSEIS at xxxiv, xxxv, 3-6, 4-54, 4-57, 4-59, 5-31, 7-4).

[62] *Id.* at 14.

[63] *Id.*

[64] Staff's Answer at 15.

that, like the Consolidated Intervenors, the Oglala Sioux Tribe misinterprets the DSEIS, citing portions of it to support its contention that relate to the operation of the Project, not establishing baseline conditions.[65] Further, the NRC Staff seeks to discredit the Oglala Sioux Tribe's reliance on Dr. Abitz's memorandum, asserting that the memorandum was created in 2009 and does not reference the DSEIS.[66]

Powertech, too, argues that the Oglala Sioux Tribe's Contention 2 is inadmissible for failure to meet the standards for new or amended contentions.[67] To support this, Powertech asserts the Oglala Sioux Tribe's allegations were addressed in documents that have been available for some time, namely the first draft license issued in July 2012 and responses to RAIs submitted in June 2011.[68] Therefore, Powertech argues, the Board should reject Contention 2 for failing to meet the timeliness standards set forth in 10 C.F.R. § 2.309(c).

In its reply to the NRC Staff's and Powertech's arguments, the Oglala Sioux Tribe argues that the lack of any baseline groundwater analysis is an omission that has been "carried forward from the application to the DSEIS."[69] The Oglala Sioux Tribe notes that the Board stated in its August 5, 2010, Order that violations of NEPA were not ripe as alleged against an applicant because it is the agency, not an applicant, that bears the burden of satisfying the statute.[70] Thus, the Oglala Sioux Tribe contends, "this NEPA contention ripened with the publication of the DSEIS and the newly available contention is timely filed."[71]

The Oglala Sioux Tribe refutes the argument that it did not properly identify the portions of the DSEIS that it claims are not in accordance with NEPA and NRC regulations by pointing to its filing and the affidavit of Dr. Moran.[72] In these documents, the Oglala Sioux Tribe contends, specific references are made to the problematic sections of the DSEIS.[73] Moreover, the Oglala Sioux Tribe argues that the nature of contentions of omission makes it "irrational for the Oglala Sioux Tribe to be able to identify those portions of the DSEIS where missing necessary data is *not* presented."[74]

Finally, the Oglala Sioux Tribe challenges the argument that it should have raised its NEPA contentions when Powertech's response to NRC Staff's RAIs were submitted. The Oglala Sioux Tribe contends that it "had already successfully

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[65] *Id.* at 17.
[66] *Id.* at 16.
[67] Powertech's Response at 12.
[68] *Id.* at 13.
[69] Oglala Sioux Tribe's Reply at 8.
[70] *Id.*
[71] *Id.*
[72] *Id.*
[73] *Id.*
[74] *Id.*

alleged that the Powertech information was inadequate" and that the additional information in the RAI responses is not a basis to find NEPA contentions based on the DSEIS inadmissible.[75] The Oglala Sioux Tribe again highlights the Board's assertion that NEPA challenges are only appropriate as applied to NRC Staff-prepared documents, and it is the agency that is responsible for complying with NEPA, not the Applicant.[76] For these reasons, the Oglala Sioux Tribe maintains that Contention 2 is admissible.

2. Board Ruling

The Oglala Sioux Tribe's proposed Contention 2 and Consolidated Intervenors' proposed Contention B are identical to the Oglala Sioux Tribe's original Contention 2 and the first part of the Consolidated Intervenors' original Contention D.[77] The Oglala Sioux Tribe argues that the analysis of the baseline conditions is mandated by statute and regulation, and that the DSEIS is inadequate because, like the ER, it fails to include a proper analysis of the required baselines with respect to groundwater quality.[78] As such, the migration tenet applies and this issue migrates from a criticism of the Powertech ER to a criticism of the NRC Staff's DSEIS. Moreover, as it did with Oglala Sioux Tribe Contention 1 and Consolidated Intervenors' Contention A, in accordance with section 2.316 the Board will combine the multiple iterations of these issue statements into a single contention as set forth in Appendix A to this decision.[79]

In making this ruling, the Board notes that it finds unpersuasive Powertech's assertion that this contention is untimely because there were document exchanges between Powertech and the NRC Staff that took place after the application was filed and before the DEIS issued. The key issue in Contention 2 is the adequacy of the DSEIS. Until the DSEIS is issued, the intervenors have no way to know in what form or manner, if any, the NRC Staff will use information from an RAI response. As a consequence, the intervenors could only file their contentions when the information appeared (or was omitted) from the DSEIS.[80] It would be patently unreasonable to require an intervenor, or a potential intervenor, to divine what use the information collected by the NRC Staff will or will not serve in the

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[75] *Id.* at 9.

[76] *Id.*

[77] LBP-10-16, 72 NRC at 400-01.

[78] Oglala Sioux Tribe's Proposed Contentions at 10.

[79] A similar contention was admitted in the Strata Energy proceeding. *See Strata Energy, Inc.* (Ross In Situ Recovery Uranium Project), LBP-12-3, 75 NRC 164, 192-95 (2012).

[80] *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-82-79, 16 NRC 1116, 1118 (1982) (noting that a late-filed contention lacks good cause when it is based on a draft EIS that contains no new information relevant to the contention).

DSEIS. Therefore, the Board finds that this contention is timely and the issues therein have migrated from their original form challenging the ER to their current form challenging the DSEIS.

C. The Oglala Sioux Tribe's Proposed Contention 3: "The DSEIS Fails to Include an Adequate Hydrogeological Analysis to Assess Potential Impacts to Groundwater"

1. Positions of the Parties

The Oglala Sioux Tribe's proposed Contention 3 is identical to the Consolidated Intervenors' proposed Contention C — "the DSEIS fails to include an adequate hydrogeological analysis to assess potential impacts to groundwater."[81] As a result of this failure, the Oglala Sioux Tribe argues that the DSEIS also does not "provide sufficient information to establish potential effects of the project on the adjacent surface and ground-water resources."[82] These inadequacies, the Oglala Sioux Tribe contends, are in contravention of 10 C.F.R. §§ 51.10, 51.70, 51.71 and NEPA.[83]

To support this contention, which is labeled a "contention of omission," the Oglala Sioux Tribe cites to Dr. Moran's supplemental declaration and points to NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications."[84] The Oglala Sioux Tribe argues that NUREG-1569 specifies the level of detail required of an application with respect to the hydrogeology of the site at issue.[85] According to the Oglala Sioux Tribe, "At minimum, the applicant must develop an acceptable conceptual model of site hydrology adequately supported by the data presented in the site characterization,"[86] which, the Oglala Sioux Tribe asserts, is not done in the DSEIS. The specific omissions the Oglala Sioux Tribe highlights include "unsubstantiated assumptions as to the isolation of the aquifers in the ore-bearing zones and failure to account for natural and man-made hydraulic conductivity through natural breccias pipe formations."[87] The Oglala Sioux Tribe maintains that the DSEIS's assurances of future tests and

[81] Oglala Sioux Tribe's Proposed Contentions at 15.
[82] *Id.*
[83] *Id.*
[84] *See id.*
[85] *Id.*
[86] *Id.* at 16 (citing Standard Review Plan for In Situ Leach Uranium Extraction License Applications, NUREG-1569, at 2-21 to 2-22 (June 2003) (ADAMS Accession No. ML031550302)).
[87] *Id.* at 16.

actions do not make up for these deficiencies.[88] Accordingly, the Oglala Sioux Tribe argues that this contention should be admitted.

In response to this contention, the NRC Staff states that the Oglala Sioux Tribe did not demonstrate that its contention is based on new or materially different information from that in the application.[89] Therefore, the NRC Staff contends that the contention is inadmissible because it does not meet the standards for new and amended contentions contained in 10 C.F.R. § 2.309(c).[90]

Additionally, the NRC Staff states that Dr. Moran's declaration, on which the Oglala Sioux Tribe relies to support its contention, overlooks relevant information that was contained in the Applicant's 2011 RAI response.[91] As a result, the NRC Staff maintains that, to the extent the Oglala Sioux Tribe disputed the information contained in the RAI response, the Oglala Sioux Tribe was obligated to file a new contention within 30 days of the issuance of that document in order to be timely under the regulations.[92] The NRC Staff also points to areas of the DSEIS that purportedly contain the information Dr. Moran claims is missing.[93] Therefore, the NRC Staff states that "the Board must reject the Intervenors' arguments because they fail to specifically address the DSEIS."[94]

The NRC Staff also states that the future actions upon which the DSEIS purports to rely in its analysis of impacts constitute a license condition, the use of which is permitted in NEPA documents.[95] The NRC Staff argues further that the regulatory arguments the Oglala Sioux Tribe makes are inapplicable because the regulations the Oglala Sioux Tribe cite pertain to safety criteria dealing with conventional milling, not to ISR activities, and are relevant to the applicant, not to the agency's NEPA review.[96]

Powertech echoes the NRC Staff's response and argues that the contention does not meet the standards for new and amended contentions.[97] The information addressed in the Oglala Sioux Tribe's Contention 3, Powertech contends, has been previously presented in the RAI responses, the first draft license, and other

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[88] *Id.* at 17.

[89] Staff's Answer at 18.

[90] *Id.*

[91] *Id.*

[92] *Id.* at 18-19.

[93] *Id.* at 19-20 (citing DSEIS §§ 3.4.3, 4.5.2.1.1.2.2, 3.5.3.1, 3.5.3.2, 3.5.3.3).

[94] *Id.* at 20 (citing *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station), CLI-01-24, 54 NRC 349, 358 (2001)).

[95] *Id.* (citing *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 17 (1999)).

[96] *Id.*

[97] Powertech's Response at 12.

areas of the record previously made available.[98] Accordingly, the contention is not based on new or materially different information and cannot be admitted.[99]

In support of its contention and in reply to the NRC Staff and Powertech, the Oglala Sioux Tribe argues that this is a "contention of omission" that "carries forward a contention admitted previously based on the same inadequate information contained in the application materials."[100] The Oglala Sioux Tribe also takes issue with the NRC Staff's argument that portions of the DSEIS contain the information the Oglala Sioux Tribe contends is missing.[101] In contrast to the case law the NRC Staff cites, the Oglala Sioux Tribe asserts that it has "include[d] citations and discussion of the applicable statutory and regulatory requirements, followed by detailed discussion of the aspects of the DSEIS . . . where the NRC Staff's NEPA document fails to meet those standards."[102] The detail and specific references to the DSEIS, the Oglala Sioux Tribe claims, distinguish it from the case law the NRC Staff cites to refute the contention.[103] Moreover, the Oglala Sioux Tribe asserts that the NRC Staff's "merits arguments is irrelevant and inappropriate at the admissibility stage."[104] Therefore, the Oglala Sioux Tribe maintains that Contention 3 is admissible.

2. Board Ruling

The Oglala Sioux Tribe's Contention 3 and Consolidated Intervenors' Contention C are the same as Oglala Sioux Tribe's original Contention 3 and portions of Consolidated Intervenors' original Contentions D and E.[105] As such, the migration tenet applies and this issue migrates from a criticism of the Powertech ER to a criticism of the NRC Staff's DSEIS.

The Consolidated Intervenors and the Oglala Sioux Tribe are presenting the same concern that was raised regarding Powertech's ER (and that was admitted as a contention) as a concern regarding the DSEIS. Thus it is not necessary to raise a new or amended contention because, as the Board has explained, if the "new" contention raises the same concern admitted at the initial stage of the proceeding, its admissibility need not be relitigated and redecided at each step

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[98] *Id.* at 13.
[99] *Id.*
[100] Oglala Sioux Tribe's Reply at 10.
[101] *Id.*
[102] *Id.* at 11.
[103] *Id.*
[104] *Id.*
[105] *See* LBP-10-16, 72 NRC at 400-07, 424-26. Consolidated Intervenors' Contention E, as originally admitted, was a combination of Consolidated Intervenors' original Contentions E and J. LBP-10-16, 72 NRC at 404-07.

of the NEPA process, namely the issuances of the DSEIS and the FSEIS. This contention is not new; it is merely the continuation of an admitted concern with the application. To the extent the intervenors have concerns with the adequacy of the hydrogeologic analysis necessary to show adequate confinement and potential impacts to groundwater, this is already an issue set for hearing. Once again, in accord with section 2.316, for efficiency and to clarify this concern, the Board combines the multiple iterations of this contention into a single contention for hearing as set forth in Appendix A to this order.[106]

D. The Oglala Sioux Tribe's Proposed Contention 4: "The DSEIS Fails to Adequately Analyze Ground Water Quantity Impacts"

1. Positions of the Parties

The Oglala Sioux Tribe's Contention 4 — "the DSEIS fails to adequately analyze ground water quantity impacts" — is identical to Consolidated Intervenors' Contention D.[107] The Oglala Sioux Tribe asserts that "the DSEIS presents conflicting information on ground water consumption such that the water consumption impacts of the project cannot be accurately evaluated."[108] This, the Oglala Sioux Tribe argues, violates 10 C.F.R. §§ 51.10, 51.70, 57.71, and NEPA.[109]

To support this contention of omission, the Oglala Sioux Tribe cites to Dr. Moran's declaration.[110] Like Consolidated Intervenors, the Oglala Sioux Tribe highlights Dr. Moran's concerns that "no data are provided for the volumes of ground water required for [nonconstruction] phases, throughout the life of the project," and that the DSEIS fails to explore the impacts on local and regional water sources of the projected large-volume water use at the site.[111]

The NRC Staff argues that the contention does not meet the standards for new and amended contentions because the Oglala Sioux Tribe has not demonstrated in what ways the contention is based on new or materially different information.[112] It also argues that the Oglala Sioux Tribe's claims "rest on an incomplete or inaccurate reading of the DSEIS" in part because Dr. Moran cites portions of the DSEIS that do not support his opinions and simultaneously overlooks portions of

[106] A similar contention was admitted in the Strata Energy proceeding. *Strata Energy, Inc.*, LBP-12-3, 75 NRC at 195-98.

[107] Oglala Sioux Tribe's Proposed Contentions at 18.

[108] *Id.*

[109] *Id.*

[110] *Id.*

[111] *Id.* at 19-20.

[112] *Id.* at 21.

the DSEIS that contain the information the Oglala Sioux Tribe alleges has been omitted.[113]

Similarly, Powertech challenges the admission of Contention 4 by asserting that the Oglala Sioux Tribe has not demonstrated that its contention is based on any new or materially different information in contravention of 10 C.F.R. § 2.309(c).[114] The information on which this contention is based, it asserts, has been previously made available and the time to challenge such information has since lapsed.[115] Accordingly, both the NRC Staff and Applicant argue that the Oglala Sioux Tribe's Contention 4 is inadmissible.

In reply, the Oglala Sioux Tribe argues that its contention specifically points to areas in the DSEIS that it claims violate NEPA and applicable regulations.[116] Additionally, the Oglala Sioux Tribe maintains that, because the NEPA issues "are based, in part, on the same information upon which the Oglala Sioux Tribe's contention regarding inadequate ground water quantity analysis in the application," it should be admitted.[117] It argues that "NRC Staff cannot release NEPA documents that blindly parallel the applicant's information and omissions and then be allowed to argue the applicant's omissions prevent filing of new contentions concerning the newly released NEPA [document]."[118]

Finally, the Oglala Sioux Tribe argues that the NRC Staff's assertion that the contention is inadmissible because certain portions of the DSEIS address the omissions the Oglala Sioux Tribe contends exist amounts to an argument on the merits and is, therefore, irrelevant at the contention admissibility stage.[119] Therefore, the Oglala Sioux Tribe maintains that Contention 4 is admissible.

2. Board Ruling

As noted, the Oglala Sioux Tribe's Contention 4 — "the DSEIS fails to adequately analyze ground water quantity impacts" — is identical to Consolidated Intervenors' Contention D. Both of these contentions raise the same concern as the Oglala Sioux Tribe's previously admitted Contention 4 and parts of Consolidated Intervenors' Contention F, which was not admitted.[120]

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[113] *Id.* at 21-22.

[114] Powertech's Response at 12.

[115] *Id.* at 13.

[116] Oglala Sioux Tribe's Reply at 11.

[117] *Id.*

[118] *Id.* at 12 (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 209 (D.C. Cir. 1991)).

[119] *Id.* at 12.

[120] *See* LBP-10-16, 72 NRC at 400-07, 426-28. The Board rejected Consolidated Intervenors' original Contention F on a similar topic. *See id.* at 407-08.

The Oglala Sioux Tribe and the Consolidated Intervenors now present the same concern that was raised by the Oglala Sioux Tribe in the initial pleading stage (and that was admitted as a contention) as a concern regarding the DSEIS. It is, therefore, unnecessary to raise a new or amended contention. To the extent the "new" contention raises the same concern admitted at the initial stage of the proceeding, it need not be repeated to remain a viable contention. Accordingly, the Oglala Sioux Tribe's concerns with the adequacy of the analysis of groundwater quantity impacts is already an issue set for hearing. As before, pursuant to section 2.316 for efficiency and to clarify this scope of this concern, the Board combines the multiple iterations of this contention into a single contention for hearing as set forth in Appendix A to this decision.

The NRC Staff argues that, although Powertech's supplemental information might have served as the basis for a late-filed contention, the contention would have been due within 30 days after the information became available.[121] The Staff, relying on *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983) and *Power Authority of the State of New York* (James A. FitzPatrick Nuclear Power Plant; Indian Point, Unit 3), LBP-01-4, 53 NRC 121, 127 (2001), further contends that the Intervenors were not permitted to wait until that information reappeared in the DSEIS to file their contentions. The Board does not agree. The scheduling order,[122] as well as Commission regulation,[123] provide that intervenors and potential intervenors have a period of time to file new or amended contentions in response to a DSEIS. They are not required to file their contentions on information or studies that are published in the period between the date for initial contentions and the date the DSEIS is published. The gravamen of this contention is not that an RAI response contained new information, but that the DSEIS ignored it. There is no way for an intervenor to know what use, if any, the NRC Staff may make of a response to a request for additional information (RAI) or a study in the DSEIS. An intervenor is entitled to see the DSEIS and then file any new or amended contentions based on what appears in the DSEIS. To do otherwise would place an impossible burden on the intervenor and an unreasonable requirement that the intervenor divine what use, if any, the NRC Staff will make of that information in the DSEIS. As noted above, the Board combines the multiple iterations of this contention into a single contention for hearing as set forth in Appendix A to this decision.

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[121] Staff's Answer at 21.

[122] *See* Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) (Oct. 16, 2012) at 3-4 (unpublished); Order (Supplementing Initial Scheduling Order) (Nov. 2, 2010) at 5-6 (unpublished).

[123] 10 C.F.R. § 2.309(b).

E. The Oglala Sioux Tribe's Proposed Contention 5: "The DSEIS Fails to Demonstrate Adequate Technical Sufficiency and Fails to Present Information in a 'Clear, Concise' Manner to Enable Effective Public Review"

1. Positions of the Parties

The Oglala Sioux Tribe's Contention 5 charges that "the DSEIS fails to demonstrate adequate technical sufficiency and fails to present information in a 'clear, concise' manner to enable effective public review."[124] This, the Oglala Sioux Tribe argues, contravenes 10 C.F.R. §§ 51.70(b), 51.120; 10 C.F.R. Part 51 Appendix A; the Administrative Procedure Act; NEPA; Regulatory Guide 3.46; and NUREG-1569, "Standard Review Plan for In Situ Leach Uranium Extraction License Applications."[125] As support for this contention, the Oglala Sioux Tribe cites Dr. Moran's Supplemental Declaration.

Specifically, the Oglala Sioux Tribe argues that the NRC Staff's "use of citations to materials incorporated by reference into the DSEIS is inadequate to justify the scientific conclusions presented."[126] As an example, the Oglala Sioux Tribe notes the DSEIS's consistent citations to "Powertech 2011," which is a 5000-page document, to support "fundamental conclusions."[127] Citations to this document, the Oglala Sioux Tribe argues, are "meaningless without more description and detail of where the information is contained in the document."[128] The Oglala Sioux Tribe also notes the DSEIS's reliance on the initial draft license, explaining that these are stale references because a revised draft license has been released.[129] As a result, the Oglala Sioux Tribe urges the republication of the DSEIS "in a manner that provides the necessary information, with the commensurate additional public comment period."[130]

In response to this contention, the NRC Staff argues that the Oglala Sioux Tribe has failed to demonstrate a genuine dispute because the relevant regulations do not mandate that NEPA documents employ a certain citation format nor do they require that "an agency support every assertion in its NEPA document."[131] The NRC Staff states that the document meets regulations so long as it provides

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[124] Oglala Sioux Tribe's Proposed Contentions at 20.
[125] *Id.*
[126] *Id.* at 21.
[127] *Id.*
[128] *Id.*
[129] *Id.* at 22.
[130] *Id.* at 23.
[131] Staff's Answer at 22.

references to the sources on which it relies.[132] In this respect, NRC Staff claims the Oglala Sioux Tribe's reliance on Dr. Moran's Declaration is misplaced because he does not address the citation formats used in the documents at issue.[133]

Additionally, the NRC Staff notes that the format of the DSEIS follows the recommendation set forth in NUREG-1749, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs."[134] This was the same format Powertech followed in its ER. Thus, NRC Staff reasons, references to the application in the DSEIS refer, generally, to parallel sections in the ER.[135] Moreover, the NRC Staff points out that the Oglala Sioux Tribe could have contacted the Staff with any questions it had regarding the DSEIS.[136]

Finally, the NRC Staff attempts to refute the Oglala Sioux Tribe's arguments regarding the revised draft license[137] by claiming that the documents that contain the information incorporated into the draft license were publicly available during the comment period.[138] Therefore, the NRC Staff concludes, the Oglala Sioux Tribe had access to and could have addressed the information contained therein at a prior time.[139] The NRC Staff states that the DSEIS does not need to be recirculated because the Oglala Sioux Tribe has failed to demonstrate there is new information that "presents a 'seriously different picture of the environmental impact[s].'"[140]

Powertech, likewise, contends that Contention 5 should not be admitted. Powertech asserts that the Oglala Sioux Tribe has failed to demonstrate that Contention 5 is based on any new or materially different information as required by 10 C.F.R. § 2.309(c) because the Oglala Sioux Tribe could have filed proposed contentions in response to the draft license, which it did not do.[141] Additionally, Powertech argues that "it is the [Oglala Sioux] Tribe's burden to review the DSEIS and find the references that are required to present admissible contentions."[142] All relevant documents, it claims, were submitted according to the standards set forth in applicable agency guidance, and, therefore, documents referenced by

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[132] *Id.* at 21-22 (citing *Western Watersheds Project v. Bureau of Land Management,* 552 F. Supp. 2d 1113, 1129-30 (D. Nev. 2008)).

[133] *Id.* at 24.

[134] *Id.* at 23.

[135] *Id.*

[136] *Id.*

[137] *See id.* at 24.

[138] *Id.*

[139] *Id.*

[140] *Id.*

[141] Powertech's Response at 14-15.

[142] *Id.* at 15.

the DSEIS should be easily found.[143] Finally, with respect to republication and recirculation, Powertech asserts that "[t]he availability of new information after issuance of a DSEIS for comment is not enough to warrant re-publication."[144] Accordingly, Powertech contends Contention 5 is inadmissible.

In response to these arguments, the Oglala Sioux Tribe contends that most of Powertech's and the NRC Staff's responses focus on merits arguments that are not appropriate at the contention admissibility stage.[145] The Oglala Sioux Tribe also urges the Board to reject the NRC Staff's assertion that it could have contacted the Staff at any time with questions regarding the DSEIS.[146] This, the Oglala Sioux Tribe argues, is not supported by law or fact.[147] Moreover, the Oglala Sioux Tribe claims that it did contact the NRC Staff by filing "detailed written comments that NRC Staff required be filed within 45 days of the DSEIS release."[148]

The Oglala Sioux Tribe also notes that, in its previous contention admissibility decision, the Board dealt with a similar contention, finding that NEPA requirements relevant to the clarity of the documents were binding on the agency only, not the Applicant.[149] With the issuance of the DSEIS, the Oglala Sioux Tribe therefore asserts that this contention is admissible.[150] Finally, the Oglala Sioux Tribe reiterates its argument with respect to the draft license, clarifying that "[i]t is the timing and lack of notice of the revised draft license that contravenes NRC regulations, not the use of draft licenses."[151] Accordingly, the Oglala Sioux Tribe maintains that Contention 5 is admissible.

2. Board Ruling

As noted *supra* Part III.A, to be admissible at this stage a contention must meet both the timeliness requirements of 10 C.F.R. § 2.309(c) and the admissibility requirements of 10 C.F.R. § 2.309(f)(1). Failure to satisfy either one of these sections results in the contention not being admissible.

Contention 5 is similar to the Oglala Sioux Tribe's original Contention 6 filed

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[143] *Id.*

[144] *Id.* (citing *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-04-39, 60 NRC 657, 659 (2004)).

[145] Oglala Sioux Tribe's Reply at 12-13.

[146] *Id.* at 13.

[147] *Id.*

[148] *Id.*

[149] *Id.* at 14.

[150] *Id.*

[151] *Id.*

with its hearing petition in response to the Powertech application.[152] The Board rejected Contention 6, in part, because the contention could be characterized as "[a] general complaint about how the information [was] presented," which was "not sufficient to raise a genuine dispute with the Application that is germane to the purpose of th[e] licensing proceeding."[153] Additionally, the Board rejected original Contention 6 because it was not adequately supported in fact and the Board was, and remains, "unaware of any legal precedent or any NRC regulations that require an application to meet any organizational criteria or else risk being classified as technically inadequate."[154] For these same reasons, the Board rejects the Oglala Sioux Tribe's proposed Contention 5 for failing to provide sufficient information to show that a genuine dispute exists in contravention of 10 C.F.R. § 2.309(f)(1)(vi) and for failing to state an adequate legal basis for the contention in contravention of 10 C.F.R. § 2.309(f)(1)(i). Further, the DSEIS follows the format recommended in NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs," a format that Powertech followed in its Environmental Report.[155]

Additionally, the Oglala Sioux Tribe provides no support for its argument that the NRC Staff must recirculate the DSEIS for public comment based on the issuance of the revised draft license. The NRC Staff need not recirculate a supplemental NEPA document every time new information becomes available.[156] Recirculation is required only when, as the NRC Staff asserted, the information presents a "seriously different picture of the environmental impacts."[157] The Oglala Sioux Tribe fails to show how the issuance of the new draft license creates such a "seriously different picture of the environmental impacts." Because Contention 5 does not meet the contention admissibility standards in 10 C.F.R. § 2.309(f)(1),[158] the Board finds it inadmissible. The Board, therefore, need not analyze the issue of timeliness.

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[152] *See* LBP-10-16, 72 NRC at 430-32. The Oglala Sioux Tribe's original Contention 6 read: "Inadequate technical sufficiency of the application and failure to present information to enable effective public review resulting in denial of due process." *Id.* at 431.

[153] *Id.* at 432.

[154] *Id.*

[155] It is ironic, however, that the NRC Staff and Powertech insist that petitioners prepare contentions that refer to specific sections of an application or an environmental report, but, when preparing the required environmental documents, they merely provide blanket citations to documents that are hundreds, and in some cases thousands, of pages long.

[156] *Hydro Resources, Inc.*, CLI-04-39, 60 NRC at 659.

[157] *Hydro Resources, Inc.*, CLI-99-22, 50 NRC at 14 (quoting *Sierra Club v. Froehike*, 816 F.2d 205, 210 (5th Cir. 1987)).

[158] 10 C.F.R. § 2.309(f)(1)(ii), (iii), (vi).

F. The Oglala Sioux Tribe's Proposed Contention 6: "Failure to Adequately Describe or Analyze Proposed Mitigation Measures"

1. Positions of the Parties

In Contention 6, the Oglala Sioux Tribe claims that the DSEIS violates 10 C.F.R. §§ 51.10, 51.70, and 51.71, and the National Environmental Policy Act and implementing regulations and "fail[s] to adequately describe or analyze proposed mitigation measures."[159] The Oglala Sioux Tribe states that NEPA requires the DSEIS to include and discuss means to mitigate adverse environmental impacts.[160] The DSEIS, it claims, does not contain the requisite detailed analysis regarding mitigation measures, nor does it evaluate the effectiveness of any of the mitigation measures it proposes.[161] For example, the Oglala Sioux Tribe states that the DSEIS relies on Powertech's "commitment to restore groundwater back to its pre-mining condition," without evaluating how effective the restoration efforts will be.[162] The Oglala Sioux Tribe then cites data supporting the fact that restoring groundwater to premining conditions is difficult and seldom entirely successful.[163] The DSEIS, the Oglala Sioux Tribe contends, fails to address "the ISL industry's historic and ongoing inability to control aquifer contamination and restore groundwater" and does not detail how the Applicant will succeed in its own efforts to protect and restore groundwater.[164]

In response to this contention, the NRC Staff argues that Powertech's plans with respect to groundwater restoration were discussed in the ER and Technical Report.[165] Therefore, the NRC Staff maintains, the Oglala Sioux Tribe should have raised this argument at a previous time.[166] The NRC Staff recognizes that the Oglala Sioux Tribe raised this argument as part of admitted Contention 2, but notes that it does "not point to any information in the DSEIS concerning mitigation measures that is significantly different from the information in the [ER]."[167]

Additionally, the NRC Staff argues that the Oglala Sioux Tribe failed to

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[159] Oglala Sioux Tribe's Proposed Contentions at 23.

[160] *Id.* at 23 (citing 40 C.F.R. § 1502.16(h)).

[161] *Id.* at 23-24. The Oglala Sioux Tribe states that "[t]he current mitigation measure discussion consists of a multi-page chart which simply lists a series of proposed mitigation measure[s], with no elaboration or other analysis of how the operator expects to accomplish these items, or the expected effectiveness/limitations of each measure, as required by NEPA." *Id.* at 27.

[162] *Id.* at 24.

[163] *Id.*

[164] *Id.*

[165] Staff's Answer at 25.

[166] *Id.* at 25.

[167] *Id.*

address a portion of the Generic Environmental Impact Statement (GEIS) that concerns the effectiveness of ISR projects in restoring groundwater to baseline conditions.[168] GEIS § 2.11.5, the NRC Staff argues, provides the data the Oglala Sioux Tribe contends are omitted.[169] Moreover, the NRC Staff asserts that the Oglala Sioux Tribe "misidentifies the proposed mitigation measure at issue"[170] as "restoration to baseline conditions," when in fact all that is required is "groundwater restoration."[171]

Finally, the NRC Staff states that, in accordance with Commission precedent, the DSEIS need not contain more information on mitigation measures than it already contains, specifically with regard to the description of the mitigation measures on which the NRC relies and the explanation of the limiting effect of the mitigation measures on environmental impacts.[172]

Powertech responds to Contention 6 by arguing that it is not based on any new or materially different information in contravention of 10 C.F.R. § 2.309(c)(1)(ii).[173] Additionally, Powertech argues that the DSEIS accounts for mitigation measures in a way that is "consistent with standard NRC practice across the board and does not result in the need for a re-evaluation of the mitigation measures and re-issuance of the DSEIS."[174] Powertech further contends that the Oglala Sioux Tribe's arguments should be construed as an "impermissible collateral attack on NRC regulations" because NUREG-1910 and several other documents "demonstrate that the [Oglala Sioux] Tribe's statements regarding ISR groundwater restoration are erroneous" because groundwater need not be restored to baseline levels.[175]

In reply, the Oglala Sioux Tribe argues that the NRC Staff's and Powertech's responses are merits arguments that are inappropriate at the contention admissibility stage.[176] Additionally, the Oglala Sioux Tribe disputes that its contention is not based on new or materially different information, asserting that "the DSEIS proposes several mitigation measures that were listed in the DSEIS as newly proposed by NRC Staff to mitigate ground water impacts."[177] The Oglala Sioux

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[168] *Id.*

[169] *Id.*

[170] *Id.* at 26.

[171] *Id.*

[172] *Id.* (citing *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 427 (2006)).

[173] Powertech's Response at 16. Applicant specifically argues that "[t]he Tribe's Contention is nothing more than an allegation that the DSEIS is deficient without any attempt to distinguish any information as new or materially/significantly different." *Id.*

[174] *Id.* at 16.

[175] *Id.* at 17.

[176] Oglala Sioux Tribe's Reply at 15.

[177] *Id.* (citing DSEIS at 6-13 to 6-14).

Tribe asserts that its contention is based on this new information, and, therefore, should be admitted.[178]

2. Board Ruling

The NRC Staff and Powertech raise four principal objections to this contention. They argue that (1) the Oglala Sioux Tribe failed to identify anything new and materially different in the DSEIS; (2) the Oglala Sioux Tribe did not identify or challenge relevant sections of the GEIS; (3) the Oglala Sioux Tribe misidentified the proposed mitigation measure standard at issue; and (4) the mitigation measures listed in the DSEIS are adequate.

The first objection — that the Oglala Sioux Tribe has not identified anything new and materially different in the DSEIS — is factually incorrect. The DSEIS explicitly states, "Based on the potential impacts identified in Chapter 4 of this draft SEIS, the NRC staff ha[s] identified additional potential mitigation measures for the proposed Dewey-Burdock ISR Project. These mitigation measures are summarized in Section 6.3."[179] In particular, "[t]he NRC staff ha[s] reviewed the mitigation measures the applicant proposed and ha[s] identified additional mitigation measures that could potentially reduce impacts (Table 6.3-1)."[180] Table 6.3-1 is a multipage table that lists additional mitigation measures. It contains the new and significant information that makes any part of this contention based on those additional mitigation measures timely under 10 C.F.R. § 2.309(c).

The second objection raised by the NRC Staff and Powertech is that the contention does not cite relevant sections of the GEIS that demonstrate the alleged omission and inadequacies. This objection is unsupported. First, the GEIS section referenced by the NRC Staff in its response — Section 2.11.5 "Aquifer Restoration" — is merely a recitation of historical aquifer restoration results; it is not a discussion of mitigation plans (the subject of the contention). Second, it is not clear NRC Staff relied upon this section of the GEIS when preparing the DSEIS, as it was not incorporated by reference or mentioned in any other manner. By contrast, the DSEIS explicitly incorporates by reference other sections of the GEIS — for example, the DSEIS explains that "NRC determinations of potential environmental impacts and the discussion of which GEIS impact conclusions were incorporated by reference are discussed in SEIS Chapter 4."[181]

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[178] *Id.*

[179] DSEIS at 6-1 (emphasis added).

[180] *Id.* at 6-12.

[181] *Id.* at 1-5. "The doctrine of *expressio unis est exclusio alterius* 'instructs that where a law expressly describes a particular situation to which it shall apply, what was omitted or excluded was intended to be omitted or excluded.'" *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford,

(Continued)

The third objection raised by the NRC Staff and Powertech is that the contention misidentifies the proposed groundwater mitigation standard, namely whether groundwater must be restored to baseline conditions. On this objection, the NRC Staff and Powertech are correct. As noted in the DSEIS, Powertech will "be required to restore groundwater parameters affected by ISR operations to levels that are protective of human health and safety,"[182] though not necessarily to background levels if, for example, alternate concentration limits are identified as protective of human health.[183] In Contention 6, the Oglala Sioux Tribe correctly noted the "protective of human health and safety" standard, but incorrectly conflated it with requiring the aquifers to be restored to background conditions.

In Contention 6, the Oglala Sioux Tribe cites groundwater restoration as *one example* of an inadequate mitigation measure. However, the Oglala Sioux Tribe contends that "this lack of analysis of proposed mitigation measures is expansive, and not limited to ground water mitigation."[184] Specifically, in Contention 6 the Oglala Sioux Tribe contends "[t]he current mitigation measure discussion consists of a multipage chart which simply lists a series of proposed mitigation measure [sic], with no elaboration or other analysis of how the operator expects to accomplish these items, or the expected effectiveness/limitations of each measure, as required by NEPA."[185]

The fourth objection by the NRC Staff and Powertech — that the mitigation measures in the DSEIS are satisfactory — is essentially a merits challenge. Both the NRC Staff and Powertech cite case law that states that "[t]he DSEIS need not contain 'a complete mitigation plan' or 'a detailed explanation of specific [mitigation] measures which will be employed.'"[186] However, the Oglala Sioux Tribe also cites to case law stating that "[a] reasonably complete discussion of possible mitigation measures" should be included in the DSEIS rather than "broad generalizations and vague references to mitigation measures."[187] Thus, the Oglala Sioux Tribe has demonstrated that a genuine dispute exists with respect to material issues of law and fact, a standard that must be met for purposes of contention admissibility.[188]

Additionally, this contention meets the other contention admissibility standards because the Oglala Sioux Tribe has provided a specific statement of the issue, has

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Nebraska), LBP-08-24, 68 NRC 691, 759 (2008) (citing *Reyes-Gaona v. North Carolina Growers Association*, 250 F.3d 851, 865 (4th Cir. 2001)).

[182] DSEIS at 2-69.

[183] *Id.* at 4-64.

[184] Oglala Sioux Tribe's Proposed Contentions at 26-27.

[185] *Id.* at 27.

[186] Staff's Answer at 26; Powertech's Response at 16.

[187] Oglala Sioux Tribe's Proposed Contentions at 24.

[188] 10 C.F.R. § 2.309(f)(1)(vi).

briefly explained the basis of the contention, has demonstrated that the issue is within the scope of this proceeding, has shown that the issue is material, and has proffered a concise statement of the facts supporting the contention.[189] Further, as noted, this contention is timely pursuant to the good cause standards set forth in section 2.309(c) for the admission of new and amended contentions. Accordingly, whether or not the list of mitigation measures in the DSEIS is satisfactory is a valid basis for a contention.[190] Therefore, the Board admits the Oglala Sioux Tribe's Contention 6.

G. The Oglala Sioux Tribe's Proposed Contention 7: "The DSEIS Fails to Include a Reviewable Plan for Disposal of 11e.(2) Byproduct Material"

1. Positions of the Parties

In Contention 7, the Oglala Sioux Tribe alleges that "the DSEIS Fails to Include a Reviewable Plan for Disposal of 11e.(2) Byproduct Material."[191] The Oglala Sioux Tribe notes that the DSEIS "indicates that Powertech may or may not use the White Mesa Uranium Mill in Utah, or some other unidentified facility, for disposal of the 11e.(2) byproduct generated at the proposed ISL Facility."[192] Thus, the Oglala Sioux Tribe argues that the DSEIS lacks "a meaningful review of impacts" in violation of NEPA and 10 C.F.R. §§ 51.10, 51.70, 51.71, which require the DSEIS to analyze impacts associated with permanent waste disposal.[193] The Oglala Sioux Tribe asserts that the discussion in the DSEIS of the permanent waste disposal plan and its impacts is deficient in several respects. First, the Oglala Sioux Tribe alleges that the DSEIS does not establish that the NRC Staff has fully evaluated the permanent waste disposal plan and its impacts. Second, the Oglala Sioux Tribe alleges that the DSEIS does not provide the public, intervenors, and other entities with sufficient information regarding the permanent waste disposal plan and its impacts to enable such interested parties to analyze fully the impacts associated with the application.[194] Additionally, the Oglala Sioux Tribe asserts that "the policies set forth by NEPA prevent the NRC [S]taff from segmenting the disposal issues from the inquiry into whether applicant will be allowed to create

[189] *Id.* § 2.309(f)(1)(i)-(v).

[190] *See* 10 C.F.R. § 51.103(a)(4) (requiring the record of decision to summarize any license conditions and monitoring programs adopted in connection with mitigation measures).

[191] Oglala Sioux Tribe's Proposed Contentions at 27.

[192] *Id.*

[193] *Id.*

[194] *Id.* at 28.

11e.(2) Byproduct material in the first instance."[195] Finally, the Oglala Sioux Tribe contends that the DSEIS's failure to analyze a disposal facility results in its failure to examine all the impacts of the proposal as required by NEPA.[196] For all these reasons the Oglala Sioux Tribe asserts this contention should be admitted.

In response, the NRC Staff notes that the draft licenses issued to Powertech contain a license condition requiring Powertech to have a disposal plan in place before operation begins.[197] The NRC Staff also states that it has "considered impacts related to the disposal of byproduct material," and that these considerations appear in the DSEIS and the GEIS.[198] The Staff argues that because the Oglala Sioux Tribe does not take issue with these specific sections of the DSEIS and GEIS, its contention is inadmissible.[199]

Furthermore, the NRC Staff states that the contention must be rejected because it is not based on new or materially different information and, therefore, is untimely.[200] Specifically, NRC Staff asserts that the Oglala Sioux Tribe is making the same arguments it made with respect to the ER.[201] Finally, the NRC Staff argues that Contention 7 "lacks a legal basis" because the standards the Oglala Sioux Tribe cites to support its contention do not apply to ISL facilities.[202]

Powertech, too, argues that the Board should reject Contention 7 because it is not based on any new or materially different information.[203] Specifically, Powertech points to the license condition in its application and First Draft License prohibiting Powertech from operating its facility until a waste disposal plan is in place.[204] Powertech also argues that Contention 7 should have been raised in response to the information contained in the First Draft License, which was issued on July 31, 2012.[205]

The Oglala Sioux Tribe claims in its reply that the Board should reject the NRC Staff's and Powertech's arguments because the Board, in ruling on its intervention petition, found that a similar contention proposed by the Oglala Sioux Tribe that challenged the application was not ripe. According to the Oglala Sioux Tribe,

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[195] *Id.* at 28-29 (citing *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 13 (2008)).

[196] *Id.* at 29.

[197] *Id.* at 27.

[198] Staff's Answer at 26-27 (citing DSEIS §§ 1.4.4, 1.4.5, 4.14, 4.3.1.1.2, 4.3.1.2.2; GEIS §§ 4.2.12, 4.2.12.2, 4.4.12.4).

[199] *Id.* at 27 (citing *Millstone*, CLI-01-24, 54 NRC at 358); *see id.* at 29.

[200] *Id.* at 27; *see* 10 C.F.R. § 2.309(c).

[201] Staff's Answer at 27.

[202] *Id.* at 27-28 (citing LBP-10-16, 72 NRC at 434).

[203] Powertech's Response at 18.

[204] *Id.*

[205] *Id.* at 18-19.

the Board explained there that only the NRC Staff is bound by NEPA, not the Applicant, and, therefore, the Oglala Sioux Tribe could refile its contention if the DSEIS did not contain an analysis of waste disposal that the Oglala Sioux Tribe found adequate.[206] Now, the Oglala Sioux Tribe argues, "the binding requirements of NEPA are squarely at issue as a result of the publication of the DSEIS," and, therefore, the contention is timely and admissible.

The Oglala Sioux Tribe further asserts that, contrary to the NRC Staff's argument, it did set forth legal bases for its contention by citing 10 C.F.R. §§ 51.10, 51.70, and 51.71 as well as 40 C.F.R. Part 40, Appendix A, CEQ regulations, and various case law.[207] Finally, the Oglala Sioux Tribe asserts that the NRC Staff's argument that its analysis is adequate under NEPA should fail because it is a merits argument that is not appropriately made at the contention admissibility stage.[208]

2. Board Ruling

This contention mirrors the Oglala Sioux Tribe's original Contention 7, which this Board found inadmissible in LBP-10-16.[209] In that Order, although the Board agreed with the Oglala Sioux Tribe that the disposal issue should be addressed more fully than it was in the application before a license is issued to Powertech, the Board nevertheless rejected the contention on ripeness grounds.[210] In proposing the contention once again in response to the DSEIS, the Oglala Sioux Tribe states that it is a contention of omission.[211] As discussed earlier, a contention of omission is mooted if the relevant document contains the allegedly omitted information.[212] The NRC Staff correctly notes that it addresses impacts related to disposal of byproduct material in the DSEIS.[213] The Staff also addresses these impacts in the GEIS, specifically in sections 4.2.12, 4.2.12.2, and 4.4.12.4. In addition, the draft licenses the NRC Staff has issued to Powertech include a license condition requiring that Powertech establish a disposal plan for byproduct material before beginning operations.[214] Therefore, this contention of omission is moot. Moreover, because the Oglala Sioux Tribe neither substantively disputes

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[206] Oglala Sioux Tribe's Reply at 16.
[207] *Id.*
[208] *Id.*
[209] LBP-10-16, 72 NRC at 432-35.
[210] *Id.* at 434.
[211] Oglala Sioux Tribe's Proposed Contentions at 28.
[212] *McGuire/Catawba,* CLI-02-28, 56 NRC at 383.
[213] *See* DSEIS §§ 1.4.4, 1.4.5, 4.14, 4.3.1.1.2, 4.3.1.2.2.
[214] *See* Draft License SUA-1600 for Powertech (USA), Inc. (July 31, 2012) at 5, 12 (ADAMS Accession No. ML12207A480) (License Conditions 9.9 and 12.6).

the analysis of impacts related to disposal of byproduct material in relevant sections of the DSEIS and the GEIS, nor addresses the license condition related to disposal of byproduct material, the Board rejects this contention as failing to comply with the admissibility dictates of 10 C.F.R. § 2.309(f)(1)(vi).[215]

H. The Oglala Sioux Tribe's Proposed Contention 8: "Requiring the Tribe to Formulate Contentions Before a Final EIS Is Released and Failing to Follow Scoping Process Violates NEPA"

1. Positions of the Parties

The Oglala Sioux Tribe alleges that Applicant "requir[ed] the tribe to formulate contentions before a final EIS [was] released and fail[ed] to follow [the] scoping process" in violation of NEPA, specifically NEPA's public participation and informed decisionmaking mandates.[216] The Oglala Sioux Tribe contends that it has been denied the benefit of a final NEPA analysis because it was required to submit contentions prior to the culmination of the NEPA process.[217] This, the Oglala Sioux Tribe contends, wastes both its and the NRC Staff's resources.[218]

Additionally, the Oglala Sioux Tribe asserts that "the DSEIS was issued without the benefit of a required scoping process."[219] It claims that, pursuant to implementing regulations, certain procedures must be conducted with regard to defining the scope of the EIS in order to satisfy NEPA requirements.[220] The Oglala Sioux Tribe asserts that Powertech did not employ the mandated procedures and, thus, the Oglala Sioux Tribe was denied the opportunity, among other things, "to provide input to help define the proposed action . . . and to ensure that other environmental review and consultation requirements related to the proposed action [were] prepared concurrently and integrated with the DSEIS."[221] In connection with this, the Oglala Sioux Tribe argues that the NRC Staff failed to prepare a summary of determinations and conclusions and provide it to scoping participants as required by regulation.[222]

In response, the NRC Staff notes that the Board previously rejected this contention in ruling on the Oglala Sioux Tribe's initial hearing petition.[223] Ad-

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[215] *See Millstone*, CLI-01-24, 54 NRC at 358.
[216] Oglala Sioux Tribe's Proposed Contentions at 30.
[217] *Id.* at 31.
[218] *Id.*
[219] *Id.* at 32.
[220] *Id.*
[221] *Id.* at 32-33.
[222] *Id.* at 33 (citing 10 C.F.R. § 51.29(b)).
[223] Staff's Answer at 29.

ditionally, NRC Staff argues that the Oglala Sioux Tribe "incorrectly states that it is the Staff who is requiring the Tribe to submit contentions on the DSEIS," when this is an obligation imposed by the regulations.[224] Because "regulations are not subject to collateral attack in NRC hearings," the NRC Staff asserts the contention must be rejected.[225] Moreover, the NRC Staff argues that the Oglala Sioux Tribe will not be denied the benefit of a final NEPA analysis because the Final Supplemental Environmental Impact Statement (FSEIS) is currently being prepared and will be provided to the Oglala Sioux Tribe upon completion.[226] At that point, the Oglala Sioux Tribe may submit additional contentions challenging the FSEIS if appropriate.[227]

With regard to the Oglala Sioux Tribe's scoping arguments, the NRC Staff asserts that the regulation on which the Oglala Sioux Tribe relies to support its arguments does not apply to a supplemental EIS, but only to an initial EIS.[228] Accordingly, the NRC Staff asserts that the Oglala Sioux Tribe's Contention 8 is inadmissible because it is outside the scope of the proceeding.[229]

Powertech, too, argues that Contention 8 is inadmissible. First, Powertech argues that the Oglala Sioux Tribe's contention does not have a legal basis because NRC regulations do not require contentions to be filed in relation to a DSEIS and the Oglala Sioux Tribe could have waited for the issuance of the FSEIS before filing new or amended contentions.[230] Additionally, Powertech argues that this contention "effectively offers a collateral attack on NRC regulations associated with administrative hearings," which is impermissible.[231]

With regard to the Oglala Sioux Tribe's scoping arguments, Powertech notes that the regulations require scoping for initial EISs, not SEISs,[232] and that the DSEIS in this case states that the "GEIS scoping process [is] sufficient for the purposes of defining the scope of this SEIS."[233] Powertech additionally points out that the NRC Staff "participated in three public scoping meetings . . . and eight public meetings to solicit comments on the draft GEIS," and received public comments on the GEIS.[234]

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[224] *Id.*
[225] *Id.* at 29-30 (citing 10 C.F.R. § 2.335(a)).
[226] *Id.* at 30.
[227] *Id.*
[228] *Id.*
[229] *Id.* (citing 10 C.F.R. § 2.309(f)(1)(iii)).
[230] Powertech's Response at 19.
[231] *Id.* at 19.
[232] *Id.* at 20 (citing 10 C.F.R. §§ 51.26(d), 51.92(d)).
[233] *Id.*
[234] *Id.*

In reply, the Oglala Sioux Tribe takes issue with both the NRC Staff's and Powertech's assertions that the Oglala Sioux Tribe will be able to propose contentions related to the FSEIS, stating that both parties have "repeated[ly] and vociferous[ly]" opposed each contention the Oglala Sioux Tribe has proposed.[235] Additionally, the Oglala Sioux Tribe relies on the Board's assertion in its August 5, 2010, ruling on its hearing petition, which stated that the Oglala Sioux Tribe would have the opportunity to file new or amended contentions in response to the draft or final SEIS.[236]

With regard to scoping, the Oglala Sioux Tribe states that "a close read of 10 C.F.R. [§§] 51.92(d) demonstrates that it does not support NRC Staff's and Powertech's position."[237] The regulation, the Oglala Sioux Tribe explains, is meant to guide NRC Staff's supplemental analysis of EISs.[238] The Oglala Sioux Tribe asserts that the different interpretations of this regulation as it pertains to the NRC Staff's NEPA review warrants a resolution and thus supports the admission of this dispute as framing a legal contention.[239]

2. Board Ruling

Contention 8 is similar to the Oglala Sioux Tribe's original Contention 8 proposed in relation to the application — "[r]equiring the [Oglala Sioux] Tribe to formulate contentions before an EIS is released violates NEPA."[240] The Board determined that the previously proposed Contention 8 was inadmissible in part because it could be properly characterized as "an impermissible attack on NRC regulations, in contravention of 10 C.F.R. § 2.335."[241] Further, the Board disagreed with the Oglala Sioux Tribe that the NRC's procedures concerning NEPA-related contentions violated the public participation and informed decisionmaking mandates of NEPA.[242] The Board rejects the portions of proposed Contention 8 that are identical to original Contention 8 for the same reasons.

Additionally, the Board rejects the remaining portion of Contention 8 that alleges that improper scoping was conducted. The Board finds that this contention fails to meet the contention admissibility standards because the Oglala Sioux Tribe did not demonstrate that a "genuine dispute exists with the applicant/licensee on

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[235] Oglala Sioux Tribe's Reply at 17.

[236] *Id.* (citing LBP-10-16, 42 NRC at 440).

[237] *Id.*

[238] *Id.* at 17-18 ("The regulation speaks in terms of applicability to a site-specific 'action' and contains no reference to generic environmental impact statements.").

[239] *Id.* at 18.

[240] LBP-10-16, 72 NRC at 436.

[241] *Id.* at 437.

[242] *Id.* at 438.

a material issue of law or fact."[243] Specifically, as Powertech points out, 10 C.F.R. § 51.26(d) provides that when a supplement to an EIS is prepared, "NRC staff need not conduct a scoping process."[244] Because the NRC Staff was not required by regulation to engage in the scoping process for the DSEIS, the Oglala Sioux Tribe's contention lacks a legal basis. The Oglala Sioux Tribe will not be denied the benefit of a full NEPA analysis because the NRC Staff is preparing an FSEIS, and the Oglala Sioux Tribe will have an opportunity to submit contentions based on the FSEIS if appropriate.[245] The Board concludes the NRC Staff was not required by regulation to engage in the scoping process for the SEIS, and therefore the Oglala Sioux Tribe's contention lacks a legal basis. The NRC Staff prepared the DSEIS in compliance with 10 C.F.R. § 51.92, "Supplement to the Final Environmental Impact Statement." Under this regulation, "a scoping process need not be used" for a supplemental EIS.[246]

Further, the NRC Staff states that it participated in three public scoping meetings (one in Casper, Wyoming) and eight public meetings to solicit comments on the draft GEIS, including one in Spearfish, South Dakota, which is within the region identified in the GEIS as being home to the proposed Dewey-Burdock project. The NRC Staff states it received and considered hundreds of public comments on the GEIS. The scoping process for the GEIS, which is applicable to Powertech and the Dewey-Burdock project as noted in the DSEIS,[247] satisfies the very scoping requirement about which the Oglala Sioux Tribe complains was disregarded. For this and the above-mentioned reasons, Contention 8 is inadmissible.

I. The Oglala Sioux Tribe's Proposed Contention 9: "The DSEIS Fails to Consider Connected Actions"

1. Positions of the Parties

The Oglala Sioux Tribe's Contention 9 asserts that "the DSEIS fails to consider connected actions" in contravention of 10 C.F.R. §§ 51.10, 51.70, 51.71, and NEPA.[248] Specifically, it contends that the NRC has failed to engage other federal agencies that are considering Powertech's proposal and, therefore, "has failed to comply with the 'action-forcing' mandate and purpose of NEPA."[249] By way of

[243] 10 C.F.R. § 2.309(f)(1)(vi).
[244] *Id.* § 51.26(d); *see also* Applicant's Response at 20.
[245] *Id.* § 2.309(f)(2).
[246] *Id.* § 51.92(d).
[247] DSEIS at 1-5.
[248] Oglala Sioux Tribe's Proposed Contentions at 33.
[249] *Id.*

example, the Oglala Sioux Tribe points out that Powertech has filed applications with the Environmental Protection Agency (EPA) concerning injection wells associated with the Dewey-Burdock site.[250] However, the Oglala Sioux Tribe argues that the DSEIS fails to conduct a NEPA analysis of the proposed injection wells, the request for which is a "connected action" that requires review pursuant to the mandates of NEPA.[251] But even if this were not considered a "connected action," the Oglala Sioux Tribe argues, injection wells "must still be fully analyzed in the 'cumulative impacts' analysis, or . . . as part of the NRC's 'hard look' review."[252]

The Oglala Sioux Tribe also takes issue with the DSEIS's reliance on the EPA's analysis to support its conclusions regarding environmental impacts.[253] This "blind reliance on other agencies," the Oglala Sioux Tribe argues, is impermissible — "[t]he DSEIS cannot rely on EPA and South Dakota permitting processes to excuse NRC's responsibilities to fully review the environmental impacts."[254]

Finally, the Oglala Sioux Tribe contends that Powertech has mischaracterized a requested permit for an injection well to dispose of chemical waste as Class V, when it is, in fact, a permit for a Class I underground disposal well.[255] The Oglala Sioux Tribe contends that the South Dakota Department of Environment and Natural Resources' classifications support this.[256] It argues that the class designation is significant because South Dakota prohibits Class I wells and that the DSEIS does not address this issue.[257] Therefore, the Oglala Sioux Tribe asserts that the DSEIS has unlawfully failed to conduct the appropriate analysis of other federal and state permits associated with the project.[258]

In response, the NRC Staff asserts that the Oglala Sioux Tribe fails to address the DSEIS and provides no support for its claim that the DSEIS inadequately addresses Powertech's applications to the EPA for certain well permits.[259] Additionally, the NRC Staff states that the Oglala Sioux Tribe's contention does not meet the admissibility standards for new and amended contentions because it is not based on new or materially different information.[260] The NRC Staff argues

[250] *Id.* at 34.
[251] *Id.*
[252] *Id.*
[253] *Id.* at 35.
[254] *Id.*
[255] *Id.* at 34-35.
[256] *Id.* at 36.
[257] *Id.*
[258] *Id.*
[259] NRC Staff's Answer at 30-31.
[260] *Id.* at 31.

that the ER discusses the permits Powertech seeks and that the Oglala Sioux Tribe should have raised its contention earlier and in relation to the ER.[261]

The NRC Staff also argues that the contention does not meet the standards set forth in 10 C.F.R. § 2.309(f)(1) because the Oglala Sioux Tribe has not demonstrated that "there is a genuine issue over whether the Staff has adequately consulted with federal agencies during its review of Powertech's application."[262] The NRC Staff argues the Oglala Sioux Tribe overlooks the fact that Staff has consulted with various agencies.[263] With regard to the EPA, the NRC Staff argues that "[a]lthough the EPA is not involved as a formal cooperating agency, the NRC has consulted with the EPA to clarify aspects of [its] permitting process as it relates to the Dewey-Burdock project."[264]

The NRC Staff also takes issue with the Oglala Sioux Tribe's claim that the DSEIS "blindly relies" on the analyses of other agencies, contending that the Oglala Sioux Tribe has not supported this assertion.[265] The NRC Staff maintains that it has independently analyzed environmental impacts and has appropriately considered the roles of other agencies, both of which are evidenced in the DSEIS.[266]

With regard to the injection wells, the NRC Staff argues that the Oglala Sioux Tribe's assertions are based on an incomplete reading of the DSEIS.[267] The NRC Staff alleges that Powertech "plans to treat liquid wastes injected into deep disposal wells to meet applicable criteria in 10 C.F.R. Part 20," which means that the liquid waste may be disposed in Class V wells rather than Class I wells.[268] Relatedly, the NRC Staff argues that the Oglala Sioux Tribe's assertion with regard to the South Dakota permitting process should be rejected because "it lacks both the specificity and support required by 10 C.F.R. § 2.309(f)(1).[269]

Powertech, too, contends that Contention 9 should fail.[270] Powertech argues that the NRC Staff specifically engaged the Bureau of Land Management as a cooperating agency; that the DSEIS was issued for public comment and the EPA was able to, and did, submit comments regarding groundwater protection; that the DSEIS addresses Class V wells; and that the Oglala Sioux Tribe did "not attempt

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[261] *Id.*
[262] *Id.*
[263] *Id.*
[264] *Id.* at 31-32.
[265] *Id.* at 32.
[266] *Id.*
[267] *Id.* at 33.
[268] *Id.*
[269] *Id.*
[270] Powertech's Response at 21.

to show how the DSEIS differs from the impact analyses offered by Powertech in previously submitted documents" in contravention of 10 C.F.R. § 2.309(c).[271]

In reply, the Oglala Sioux Tribe asserts that both Powertech's and the NRC Staff's arguments relate to the merits of the proceeding and are therefore irrelevant at the contention admissibility stage.[272] Additionally, the Oglala Sioux Tribe notes that "[t]his contention is yet another that the Tribe raised previously, which the Board held inadmissible because it raised NEPA issues that were held inapplicable to the Applicant."[273] Finally, the Oglala Sioux Tribe notes that NRC Staff's arguments themselves refute the Staff's assertion that the contention is not specific enough to satisfy contention admissibility standards because the contention was made with enough specificity that the NRC Staff could, and did, respond in detail.[274]

2. Board Ruling

Contention 9 is similar to the Oglala Sioux Tribe's original Contention 9 filed in response to Powertech's application. At that stage, the Board found that Contention 9 was premature because it is the NRC's responsibility, not the applicant's, to consider the actions of other federal agencies involved in the licensing action in the context of NEPA.[275] Therefore, the Board found that this contention would ripen for review only upon the issuance of the DSEIS and that the Oglala Sioux Tribe could raise its contention in relation to the DSEIS if it felt the same deficiencies remained. The Oglala Sioux Tribe believes the same deficiencies remain and, accordingly, filed the pending contention.

This contention is timely because it is based on new and materially different information published in the DSEIS that could not be challenged previously.[276] The issuance of the DSEIS provides the opportunity for intervenors to challenge the adequacy of the NRC Staff's review, which is mandated by NEPA. The contention was filed within the deadline established by the Board and is timely under the standards set forth in 10 C.F.R. § 2.309(c)(1).

Additionally, this contention meets the admissibility standards of 10 C.F.R. § 2.309(f)(1). The contention presents issues that are material to the issues of this proceeding and it provides specific examples in the DSEIS where the NRC allegedly inappropriately defers to the EPA and South Dakota in determining that

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[271] *Id.*
[272] Oglala Sioux Tribe's Reply at 18-19.
[273] *Id.* at 18 (citing LBP-10-16, 72 NRC 440).
[274] *Id.* at 19-20.
[275] LBP-10-16, 72 NRC at 440.
[276] *See* 10 C.F.R. § 2.309(c).

environmental impacts of the proposed project will be small.[277] Additionally, the Oglala Sioux Tribe has described an issue that is within scope of this proceeding, raised specific issues of law and fact, provided an explanation of the basis for the contention, and established that there exists a genuine dispute as to whether or not the NRC Staff has improperly deferred to the EPA and South Dakota in conducting its NEPA analysis. The Oglala Sioux Tribe's Contention 9 is, therefore, admitted.

J. The Oglala Sioux Tribe's Proposed Contention 10: "The Narrow Scope of the NEPA Process Conducted by NRC Staff Excluded Actions, Alternatives, Impacts and Agencies"

1. Positions of the Parties

In Contention 10, the Oglala Sioux Tribe asserts that "the narrow scope of the NEPA process conducted by NRC Staff excluded actions, alternatives, impacts, and agencies."[278] More specifically, the Oglala Sioux Tribe asserts that the NRC has failed to engage other relevant federal, state, and local agencies and "has not analyzed impacts subject to jurisdiction and control of these other agencies," and has thus failed to comply with NEPA's action-forcing mandate and general purpose.[279]

The Oglala Sioux Tribe asserts that NEPA requires the agency to consider actions "connected" to the project under review as well as the "cumulative impact." Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency . . . undertakes such other actions."[280] To satisfy these requirements, NRC must conduct the NEPA process by consulting with "cooperating agencies."[281] The Oglala Sioux Tribe contends that "the unlawfully limited scope and absence of cooperating agencies in the preparation of the DSEIS has omitted these important components of the NEPA process."[282]

As an example of this omission, the Oglala Sioux Tribe asserts that Powertech has filed applications with the EPA for Class III and Class V injection well permits, which the Oglala Sioux Tribe maintains is a connected action.[283] However, the

[277] Oglala Sioux Tribe's Proposed Contentions at 35.
[278] *Id.* at 36.
[279] *Id.* at 36-37.
[280] *Id.* at 37 (quoting 40 C.F.R. § 1507.7).
[281] *Id.*
[282] *Id.* at 38.
[283] *Id.*

Oglala Sioux Tribe asserts that "the NRC did not invite the EPA to participate in the NEPA analysis of the proposal for these injection wells that is necessary to lawful NEPA analysis."[284] Additionally, the Oglala Sioux Tribe contends that the NRC Staff has not properly analyzed certain impacts.[285] The omission of this analysis was detailed in comments to the DSEIS that were provided to the NRC Staff on January 10, 2013.[286] The Oglala Sioux Tribe also asserts the DSEIS finds that certain statutory protections are not within the scope of the NEPA analysis, resulting in an "unlawfully narrow scope" of the NEPA review.[287] This, the Oglala Sioux Tribe claims, is compounded by the failure of the NRC to invite cooperating agencies to participate in the NEPA process.[288]

In response, the NRC Staff argues that the Oglala Sioux Tribe's contention is inadmissible.[289] First, the NRC Staff states, the Oglala Sioux Tribe repeats in Contention 10 arguments made in Contention 9, specifically the DSEIS's omission of an analysis of the EPA permitting processes and NRC Staff's alleged failure to consult cooperating agencies.[290] With regard to this piece of Contention 10, NRC Staff cites its response in opposition to Contention 9.[291]

Next, the NRC Staff states that the Oglala Sioux Tribe overlooks sections of the DSEIS and GEIS that contain information concerning the statutory protections the Oglala Sioux Tribe contends have been omitted.[292] Thus, the NRC Staff asserts, the Oglala Sioux Tribe "relies on a blanket claim that the DSEIS lacks required information, failing to address the actual content of the DSEIS and the GEIS."[293]

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[284] *Id.*

[285] *Id.*

[286] *Id.*

[287] *Id.* at 38-39.

[288] *Id.* at 39.

[289] Staff's Answer at 34.

[290] *Id.* at 34. Additionally, with regard to the Oglala Sioux Tribe's argument regarding consultation with cooperating agencies, the NRC Staff asserts that the Oglala Sioux Tribe fails to point to any legal standards requiring the Staff to designate certain agencies as cooperating agencies. *Id.* The NRC Staff also contends that the Oglala Sioux Tribe "overlooks the substantial steps the Staff has taken to engage other agencies in the development of the DSEIS," including the U.S. Army Corps of Engineers, the U.S. Forest Service, and the South Dakota Department of Environmental and Natural Resources as well as numerous American Indian Tribes. *Id.* at 34-37.

[291] *Id.* at 34.

[292] *Id.*

[293] *Id.* at 35. The NRC Staff also rejects any argument the Oglala Sioux Tribe implicitly makes regarding the Uranium Mill Tailings Radiation Control Act, 42 U.S.C. §§ 7901-7942, which deals with the reclamation and long-term maintenance of uranium mill sites. *Id.* Any arguments the Oglala Sioux Tribe makes with respect to this Act or the actions governed by such must fail, the NRC Staff states, because the Oglala Sioux Tribe "fails to show those impacts are within the scope of this proceeding"

(Continued)

Finally, the NRC Staff asserts that the Oglala Sioux Tribe's claim that the DSEIS does not discuss impacts that fall within the jurisdiction of other agencies must fail because the claim should have been raised based on the ER, which, the NRC Staff states, addresses the permits Powertech must obtain from other agencies as well as environmental impacts of the project.[294] Thus, the NRC Staff states that Contention 10 is not based on any new or materially different information.

Powertech argues that Contention 10 should be rejected because the Oglala Sioux Tribe incorrectly claims that the EPA has not been involved in the NEPA review.[295] Powertech states that the EPA submitted extensive comments on previous DSEISs created for other ISR operating license applications and on the DSEIS prepared for the Dewey-Burdock Project.[296] Powertech asserts that the "NRC Staff is not required to formally consult with any party on the preparation of a 10 C.F.R. Part 51 DSEIS; but rather, it makes the document available for public comment from all interested stakeholders."[297] Moreover, Powertech claims that the Oglala Sioux Tribe was aware of the fact that EPA was not invited to be a formal consulting party in this process, and, therefore, this contention is not based on any new or materially different information in violation of the timeliness requirements of 10 C.F.R. § 2.309(c).[298]

Further, Powertech asserts that the Oglala Sioux Tribe's "allegation that the DSEIS omits discussions/analyses on a number of issues is incorrect."[299] Discussions of the relevant issues, it claims, can be found in the DSEIS's table of contents.[300] Therefore, Powertech asserts, Contention 10 must fail.

In reply, the Oglala Sioux Tribe contends that most of Powertech's and NRC Staff's arguments against Contention 10 are based on the underlying merits of the case, which is inappropriate at the contention admissibility stage.[301] Additionally, the Oglala Sioux Tribe asserts that Powertech's argument that there is no legal basis for Contention 10 is incorrect because the Oglala Sioux Tribe set forth "multiple legal bases" for this contention, including "NRC NEPA regulations, relevant

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and, with regard to the reclamation and maintenance of the White Mesa site — an operating uranium mill in Utah — the Oglala Sioux Tribe "fails to show [related impacts] are anything but remote and speculative." *Id.*

[294] *Id.* at 35-36.

[295] Powertech's Response at 22.

[296] *Id.*

[297] *Id.*

[298] *Id.*

[299] *Id.*

[300] *Id.* at 22-23.

[301] Oglala Sioux Tribe's Reply at 19.

federal NEPA case law, NEPA statutory provisions, [and] CEQ regulations."[302] Therefore, the Oglala Sioux Tribe maintains Contention 10 is admissible.

2. Board Ruling

Contention 10 is overly broad and lacks the specificity necessary to be admitted. For example, the Oglala Sioux Tribe's first illustration of the DSEIS's allegedly narrow scope repeats an argument from its original Contention 9 in which it claims the DSEIS fails to address EPA permitting processes. The DSEIS, however, addresses the necessary EPA permits.[303] Based on the Commission's *Millstone* decision, the Board must reject this argument.[304]

The Oglala Sioux Tribe next argues that the DSEIS improperly excludes impacts in areas covered by numerous federal laws, including the National Historic Preservation Act, the Endangered Species Act, the Safe Drinking Water Act, the Migratory Bird Treaty Act, and the Clean Air Act. The NRC Staff points out that the DSEIS contains the allegedly missing information.[305] Consultations under the NHPA and the Endangered Species Act appear in DSEIS §§ 1.7.1, 1.7.2, and 1.7.3.5. Environmental impacts in areas covered by these two statutes are addressed in DSEIS §§ 4.6.1 and 4.9.1. The Safe Drinking Water Act is addressed when the underground injection process and the protection of aquifers at ISR facilities is discussed in GEIS § 1.7.2.1 and DSEIS §§ 2.1.1.1.2.3.1 and 2.1.1.1.4. The NRC Staff also discusses the application of Safe Drinking Water Act provisions to groundwater resources at the Dewey-Burdock Project in DSEIS § 4.5.2.1. The Migratory Bird Treaty Act is addressed in DSEIS § 4.6, and the Clean Air Act is referenced in GEIS § 1.7.2.2 and DSEIS §§ 3.7.2 and 4.7. Therefore, these portions of this contention of omission are moot and fail under 10 C.F.R. § 2.309(f)(1)(vi) because they are addressed in the DSEIS and the Oglala Sioux Tribe has not challenged the substance of these discussions.

Finally, the Oglala Sioux Tribe argues that in preparing the DSEIS the NRC Staff improperly failed to invite other government agencies to participate as cooperating agencies. This argument is a variant of Contention 9, where the Oglala Sioux Tribe argues that the NRC Staff failed to consider impacts within the jurisdiction of other agencies. The Oglala Sioux Tribe does not point to any legal standard requiring that the NRC Staff enlist specific agencies as cooperating agencies. The regulation cited by the Oglala Sioux Tribe, 10 C.F.R. § 51.10,

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[302] *Id.* at 19 (citing Oglala Sioux Tribe's Proposed Contentions at 37-38).

[303] *See* DSEIS § 2.1.1.1.2.3.1.

[304] *Millstone*, CLI-01-24, 54 NRC at 358 ("The intervenor must do more than submit 'bald or conclusory allegation[s]' of a dispute with the applicant." (alteration in original)).

[305] Staff's Answer at 34-35.

specifically reserves the NRC's right to prepare an independent EIS whenever the NRC has regulatory authority over an activity.

Moreover, the contention overlooks the steps the NRC Staff has taken to engage other agencies in the development of the DSEIS. Chapter 1 of the DSEIS states that the NRC and BLM are working as cooperating agencies to evaluate the environmental impacts of the Dewey-Burdock Project. Section 1.7.3 of the DSEIS provides summaries of the NRC Staff's interactions with other agencies and organizations, including the U.S. Army Corps of Engineers, the U.S. Forest Service, the U.S. Geological Survey, the South Dakota Department of Environment and Natural Resources, the South Dakota State Historic Preservation Office, the Edgemont Area Chamber of Commerce, and Custer County Planning and Economic Development. This contention is therefore inadmissible for its failure to satisfy section 2.309(f)(1)(vi), which requires that an intervenor demonstrate that a genuine dispute exists on a material issue of law or fact.

K. The Oglala Sioux Tribe's Proposed Contention 11: "The DSEIS Fails to Adequately Analyze Cumulative Impacts"

1. Positions of the Parties

In Contention 11, the Oglala Sioux Tribe argues that "the DSEIS fails to adequately analyze cumulative impacts associated with the Dewey-Burdock proposal as required by 10 C.F.R. §§ 51.10, 51.70, and 51.71, and [NEPA]."[306] This contention is similar to the Oglala Sioux Tribe's initial Contention 7, which was ruled inadmissible.[307] To support the present contention, the Oglala Sioux Tribe discusses the cumulative impact requirement, stating that, in the mining context, "a [NEPA] analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment."[308] This requirement, the Oglala Sioux Tribe claims, "prevents agencies from undertaking a piecemeal review of environmental impacts."[309]

Here, the Oglala Sioux Tribe asserts that Powertech has included in its application the proposal to use the Dewey-Burdock plant in the future to receive and process uranium from other proposed projects, ISL operators, and licensed

[306] Oglala Sioux Tribe's Proposed Contentions at 40.

[307] LBP-10-16, 72 NRC at 432-35.

[308] Oglala Sioux Tribe's Proposed Contentions at 40 (alteration in original) (quoting *Te-Moak Tribe of Western Shoshone*, 608 F.3d 592, 603 (9th Cir. 2010)).

[309] *Id.* at 41 (citing *Earth Island Institute v. U.S. Forest Service*, 351 F.3d 1291, 1306-07 (9th Cir. 2006)).

facilities.[310] However, the Oglala Sioux Tribe contends that the "DSEIS mentions these mining projects only briefly in the 'affected environment' portion of the document with no analysis of the impacts."[311] The Oglala Sioux Tribe asserts this is insufficient and claims that other mining developments in the region must be evaluated.[312] Additionally, the Oglala Sioux Tribe specifically states that cumulative impacts must be assessed with regard to what the Oglala Sioux Tribe views as well-documented soil and groundwater contamination from the Black Hills Ordnance Depot.[313] Specifically, the Oglala Sioux Tribe asserts a "competent cumulative impact analysis must address potential exacerbation of ground water contamination associated with chemicals from the Depot caused by the proposed Dewey-Burdock project."

In response, the NRC Staff argues that this contention is inadmissible. It states that, in addition to the portion of the DSEIS cited by the Oglala Sioux Tribe, chapter 5 of the DSEIS contains the NRC Staff's analysis of the cumulative impacts "from past, present, and reasonably foreseeable uranium recovery actions in the vicinity of the Dewey-Burdock Project."[314] Because the Oglala Sioux Tribe did not address chapter 5 and its contents, NRC Staff argues Contention 11 must be rejected.[315]

Additionally, the NRC Staff argues that, although the DSEIS does not address the Black Hills Ordnance Depot or the Bear Lodge rare earth minerals mine, which is a second project the Oglala Sioux Tribe contends has not been adequately analyzed, the Oglala Sioux Tribe has not identified any new or materially different information on which this portion of its contention is based.

Powertech also argues that the Oglala Sioux Tribe's Contention 11 is inadmissible.[316] Specifically, Powertech states that the portion of the contention concerning past uranium mining should have been filed in response to its RAI responses that address potential impacts from historical mining and exploration drilling and that the time for doing so has lapsed.[317]

Powertech also asserts that the Oglala Sioux Tribe's contention is factually incorrect in two ways. First, Powertech states that the DSEIS addresses relevant ISR operations in its discussion of cumulative impacts, specifically noting the Edgemont Uranium District and the Cameco Crow Butte facility.[318] Second,

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[310] *Id.* at 42 (citing Application at 1-25).
[311] *Id.*
[312] *Id.*
[313] *Id.* at 42.
[314] Staff's Answer at 38.
[315] *Id.*
[316] *See* Powertech's Response at 23-24.
[317] *Id.* at 23.
[318] *Id.*

Powertech states that the DSEIS recognizes that Powertech has not indicated that it will move forward with its nearby proposed mining facilities. Powertech contends that even if these facilities are completed, it has not indicated with certainty that it will employ the Dewey-Burdock site for processing.[319]

Finally, Powertech makes an argument similar to the NRC Staff's, noting that, with regard to two specific facilities — the Bear Lodge rare earths minerals mine and the Black Hills Ordnance Depot — the Oglala Sioux Tribe has not demonstrated that its contention is based on new or materially different information.[320]

In its reply in support of Contention 11, the Oglala Sioux Tribe argues that the NRC Staff's and Powertech's arguments are "inappropriately timed merits arguments."[321] Additionally, the Oglala Sioux Tribe argues that, "rather than showing that the DSEIS made a cumulative analysis, the only reference NRC Staff or Powertech points to is a single statement in the cumulative impacts analysis that states that NRC Staff declined to review the impacts from the activities that form the basis of the Tribe's cumulative impacts argument," namely the two other facilities Applicant has proposed.[322]

Finally, the Oglala Sioux Tribe urges the Board to reject Powertech's and the NRC Staff's argument that it should have filed this contention based on Powertech's RAI responses.[323] The Oglala Sioux Tribe argues that the Board stated that NEPA imposes obligations on the agency, not on the applicant, and, therefore, allegations of NEPA violations do not ripen until the issuance of the NRC Staff's environmental documents."[324] This contention, the Oglala Sioux Tribe asserts, is based solely on NEPA and was, therefore, not ripe for review until the issuance of the DSEIS.[325]

2. Board Ruling

Although this contention was timely raised as a challenge to the DSEIS, it is inadmissible because it does not provide sufficient information to show a genuine dispute exists on a material issue of law or fact.[326] There is no support for the allegation that cumulative impacts were not considered in the DSEIS. To the contrary, chapter 5 of the DSEIS contains the NRC Staff's analysis of the cumulative impacts "from past, present, and reasonably foreseeable uranium

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[319] *Id.* at 23-24.
[320] *Id.* at 24.
[321] Oglala Sioux Tribe's Reply at 19.
[322] *Id.* at 19.
[323] *Id.* at 20.
[324] *Id.*
[325] *Id.*
[326] *See* 10 C.F.R. § 2.309(f)(1)(vi).

recovery actions in the vicinity of the Dewey-Burdock Project."[327] Because the Oglala Sioux Tribe did not address chapter 5 and its contents, the Board cannot admit Contention 11 based on this contention's failure to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(i), (vi).

L. The Oglala Sioux Tribe's Proposed Contention 12: "The DSEIS Fails to Consider All Reasonable Alternatives"

1. Positions of the Parties

The Oglala Sioux Tribe contends that "the DSEIS fails to adequately analyze all reasonable alternatives as required by 10 C.F.R. §§ 51.10, 51.70, and 51.71, and [NEPA]."[328] The Oglala Sioux Tribe asserts that, pursuant to NEPA, agencies must analyze alternatives to proposed federal actions.[329] With regard to the proposed Dewey-Burdock Project, the Oglala Sioux Tribe claims that "[n]umerous unexplored and unreviewed alternatives exist."[330] Specifically, the Oglala Sioux Tribe states that the NRC Staff should consider (1) "an alternative that precludes adoption of any Alternate Concentration Limits . . . for ground water restoration," (2) an alternative that would prevent a proponent from mining additional well fields until it has demonstrated that it has operated without excursions and that previously mined well fields have been restored, (3) an alternative of permitting operation of either the Dewey or Burdock sites only once the proponent has shown that the other area has been mined without excursion and with restoration, and (4) an alternative of prohibiting "any extraction from aquifers, or portions of aquifers, for which the applicant has not yet demonstrated confined conditions."[331]

In response to this contention, the NRC Staff argues that the Oglala Sioux Tribe's arguments are not timely.[332] Specifically, the NRC Staff states that the ER addresses alternatives to the proposed action, mitigation measures, and groundwater monitoring.[333] The NRC Staff asserts that Contention 12 should have been filed within 30 days of the issuance of the ER and is not based on any new or materially different information in contravention of 10 C.F.R. § 2.309(c).[334]

With regard to the Oglala Sioux Tribe's first suggestion that Alternate Concentration Limits (ACLs) be prohibited, the NRC Staff argues that the Oglala Sioux

[327] Staff's Answer at 38.
[328] Oglala Sioux Tribe's Proposed Contentions at 43.
[329] *Id.*
[330] *Id.* at 44.
[331] *Id.*
[332] Staff's Answer at 39.
[333] *Id.*
[334] *Id.* at 40.

Tribe "overlooks the very purpose of [ACLs], which is to address situations where restoring groundwater to baseline conditions . . . would not be practicable."[335] The second and third proposals, the NRC Staff asserts, "would require a licensee to suspend ISR operations for at least one year and likely longer," and the Oglala Sioux Tribe does not address whether this is feasible for all ISR operations or for the Dewey-Burdock site.[336] Regarding the fourth alternative, the NRC Staff argues that "the [Oglala Sioux] Tribe overlooks that such a license condition has already been proposed," specifically license condition 10.10.B.[337] With respect to the other arguments, the NRC Staff asserts that the Oglala Sioux Tribe "fails to show there is a genuine issue as to whether the alternative mitigation measures it identifies are feasible."[338] Overall, the NRC Staff argues that the Oglala Sioux Tribe has not demonstrated "a genuine issue as to whether the alternative mitigation measures it identifies are feasible."[339]

Powertech also asserts that Contention 12 is inadmissible. To support its assertion, Powertech first argues that the contention is premature because the DSEIS is not the final version of the NRC's environmental review.[340] Powertech states that, if appropriate, the Oglala Sioux Tribe can challenge the NRC's final analyses when the FSEIS is issued.[341] Additionally, Powertech argues that the NRC Staff need only analyze "reasonable" alternatives, and the Oglala Sioux Tribe has not distinguished reasonable alternatives from unreasonable ones.[342]

With specific regard to the Oglala Sioux Tribe's proposed alternative that ACLs be prohibited, Powertech argues that ACLs are a legal right under 10 C.F.R. Part 40, Appendix A, Criterion 5B(5) and, therefore, the Oglala Sioux Tribe's argument is an impermissible collateral attack on a regulation.[343] Finally, Powertech argues that Contention 12 is not based on information that is new or materially different from the ER.[344]

In reply to these arguments, the Oglala Sioux Tribe urges the Board to reject the NRC Staff's argument that Contention 12 is too late and Powertech's argument that it is too early.[345] Rather, the Oglala Sioux Tribe asserts, the contention is based on the NRC's analysis of alternatives that "was only put forth publicly upon

[335] *Id.* at 41.
[336] *Id.*
[337] *Id.* at 40.
[338] *Id.*
[339] *Id.*
[340] Powertech's Response at 25.
[341] *Id.*
[342] *Id.*
[343] *Id.* at 25-26.
[344] *Id.* at 26.
[345] Oglala Sioux Tribe's Reply at 20.

the issuance of the DSEIS."[346] The Oglala Sioux Tribe claims that its contention concerns whether the NRC Staff fulfilled its NEPA obligations, a question that is ripe for review at this time.[347] Moreover, the Oglala Sioux Tribe states that the NRC Staff's and Powertech's arguments that the alternatives the Oglala Sioux Tribe suggested were not reasonable are merits arguments that are inappropriately raised at the contention admissibility stage.[348]

2. Board Ruling

The NRC Staff argues this contention is filed too late.[349] Powertech argues this contention was filed too early and is not yet ripe for consideration.[350] Both the NRC Staff and Powertech are incorrect. This contention has been timely filed. It addresses issues that arise from the DSEIS that could not have been raised at an earlier stage of the proceeding. It is also in conformance with the scheduling order in this case.[351]

This contention is inadmissible, however, because it does not meet the standards in section 2.309(f)(1). It is insufficient for the Oglala Sioux Tribe simply to allege that "numerous unexplored and unreviewed alternatives exist."[352] The Oglala Sioux Tribe fails to show there is a genuine issue as to whether the alternative mitigation measures it identifies are feasible. Under NEPA, an agency need not discuss alternatives that are "infeasible, ineffective, or inconsistent with the basic policy objectives for the management of the area."[353] An alternative might not be feasible for a variety of reasons, including a failure of the alternative to meet the project's purpose and need.[354] Here, the Oglala Sioux Tribe proposes that the NRC impose a license condition prohibiting the use of ACLs. This pro-

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[346] *Id.*

[347] *Id.* at 21.

[348] *Id.*

[349] Staff's Answer at 39.

[350] Powertech's Response at 25.

[351] Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) (Oct. 16, 2012) at 3-4 (unpublished).

[352] Oglala Sioux Tribe's Proposed Contentions at 44.

[353] *Northern Alaska Environmental Center v. Kempthorne,* 457 F.3d 969, 978 (9th Cir. 2006) (quotation marks and internal citations omitted); *see also Fuel Safe Washington v. Federal Energy Regulatory Commission,* 389 F.3d 1313, 1323 (10th Cir. 2004) (holding that an "agency need not analyze the 'environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or . . . impractical or ineffective.'" (quoting *All Indian Pueblo Council v. United States,* 975 F.2d 1437, 1444 (10th Cir. 1992))).

[354] *Exelon Generation Co.* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806 (2005) (excluding an energy efficiency alternative because it would not advance the applicant's goals), *aff'd, Environmental Law and Policy Center v. NRC,* 470 F.3d 676 (7th Cir. 2006).

posal overlooks the very purpose of ACLs, which is to address situations where restoring groundwater to baseline conditions or MCLs would not be practicable.[355] The Oglala Sioux Tribe must show that a particular alternative was not discussed in the DSEIS and provide some support that the alternative is reasonable.[356] The Oglala Sioux Tribe has not done this and therefore Contention 12 is inadmissible.

M. The Oglala Sioux Tribe's Proposed Contention 13: "Failure to Take a Hard Look at Impacts Associated with Air Emissions and Liquid Waste"

1. Positions of the Parties

The Oglala Sioux Tribe contends that the DSEIS fails to take a "hard look" at impacts of the proposed mine related to air emissions and liquid waste disposal in violation of 10 C.F.R. §§ 51.10, 51.70, 51.71, and NEPA.[357] With regard to air emissions, the Oglala Sioux Tribe asserts that "the DSEIS lacks current and confirmed information on air emissions and their impacts on various 'receptors' in the region," including "people, plants, animals, water bodies, soil, [and] National Parks."[358] Specifically, the Oglala Sioux Tribe argues that the modeling employed in the DSEIS is inadequate because it is based on information provided by the applicant that has since been revised.[359] Instead, the Oglala Sioux Tribe contends, the NRC Staff should have delayed the DSEIS and permitted Powertech to provide updated information. Having failed to do so, the Oglala Sioux Tribe asserts that the DSEIS should be reissued for public review and comment.[360]

The Oglala Sioux Tribe maintains that the same deficiencies affect the air impacts analysis.[361] Specifically, the Oglala Sioux Tribe argues that "an emission inventory for PM2.5 particulate emissions, to which radioactive elements may attach and be dispersed via regional dispersion, were not available and were not considered in the DEIS dispersion modeling."[362] The Oglala Sioux Tribe also takes issue with the DSEIS's reliance on "Powertech's 'commitment' to provide

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[355] *See* 10 C.F.R. Part 40, Appendix A, Criterion 5B(5). Criterion 5B(5) prescribes three alternative standards for groundwater restoration at ISR facilities: (1) background concentrations, (2) maximum values from chart 5C, or (3) an ACL.

[356] *Union Electric Co.* (Callaway Plant, Unit 1), LBP-12-15, 76 NRC 14, 36 (2012). *See, e.g.*, *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 341 (2012), *petition for review filed sub nom. Beyond Nuclear v. NRC*, No. 12-1561 (1st Cir. May 7, 2012).

[357] Oglala Sioux Tribe's Proposed Contentions at 44.

[358] *Id.* at 45.

[359] *Id.*

[360] *Id.* at 46.

[361] *Id.*

[362] *Id.* (citing DSEIS at C-16).

accurate and useful information on air emissions in a final SEIS," claiming that this does not satisfy the NRC's obligations under NEPA.[363] It further argues that there are methodological flaws in the DSEIS's analysis of the impact of wind, including wind storms and tornadoes.[364] These deficiencies, it states, contribute to unresolved questions of radioactive contamination.[365]

Additionally, the Oglala Sioux Tribe argues that "the DSEIS states that the applicant proposes to rely on Reverse Osmosis (RO) for treatment of its liquid wastes," but fails to review the quality, extent, or impacts of the disposed waste or the potential limitations and failings of the RO process.[366] The Oglala Sioux Tribe also asserts that, in violation of NEPA and NRC regulations, the DSEIS "fails to adequately address disposal options should the Class V Underground Injection Control permit be denied."[367] Finally, with regard to waste, the Oglala Sioux Tribe argues that the DSEIS does not adequately address water treatment proposals and it "does not detail any information regarding plans should the un-reviewed water treatment plan not perform as expected."[368]

The last part of Contention 13 alleges that "the DSEIS fails to properly account for impacts to wildlife resulting from land application of ISL wastes."[369] Specifically, the Oglala Sioux Tribe notes that the DSEIS does not address the risks of selenium contamination resulting from ISL waste disposal through land application that the Fish and Wildlife Service has identified.[370] This results in an incomplete review violative of NEPA's "hard look" requirement.[371]

In response, the NRC Staff asserts that the portion of Contention 13 related to the air emissions model in the DSEIS is based on an incomplete reading of the DSEIS.[372] The Oglala Sioux Tribe, NRC Staff argues, overlooks the fact that the DSEIS addresses the new information Powertech issued regarding air emissions.[373] According to the NRC Staff, because the Oglala Sioux Tribe did not directly challenge the information relevant to its argument, the Oglala Sioux Tribe's assertions in this regard must be rejected.[374] Even had the Oglala Sioux Tribe challenged the new information, the NRC Staff contends, the challenge

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[363] *Id.* at 47.
[364] *Id.*
[365] *Id.*
[366] *Id.* at 48 (citing DSEIS at 3-105).
[367] *Id.* at 49.
[368] *Id.*
[369] *Id.* at 50.
[370] *Id.*
[371] *Id.*
[372] Staff's Answer at 42.
[373] *Id.*
[374] *Id.*

would be untimely because the information was available prior to the issuance of the DSEIS.[375]

The NRC Staff argues that the portions of Contention 13 concerning wind are inadmissible for failing to meet the requirement that new or amended contentions filed after the initial deadline be based on new or materially different information.[376] Information regarding wind and the issues derived therefrom, the NRC Staff contends, was available in the ER and in a 2011 submission from Powertech to the NRC.[377] Moreover, the Oglala Sioux Tribe specifically states that the potential impacts of tornadoes were not properly assessed in the DSEIS, an argument the Staff asserts was already raised and rejected by the Board in its ruling on the Oglala Sioux Tribe's initial hearing petition.[378] The Staff notes also that the Oglala Sioux Tribe fails to demonstrate why Powertech's submission of new data with regard to air emissions contravenes NEPA.[379] Moreover, the NRC Staff notes that it explained in the DSEIS that new data could emerge that affects its analysis.[380] There is no error, the NRC Staff asserts, in its basing the data in the DSEIS on information available at the time of its production.[381]

With regard to liquid waste disposal, the NRC Staff states that the information the Oglala Sioux Tribe claims is missing can be found both in Powertech's ER and the GEIS, which discusses the RO process, impacts on groundwater, and other relevant processes.[382] The NRC Staff claims that the information from Dr. Moran that the Oglala Sioux Tribe cites as support for this contention, "neither addresses this information nor explains how the information in the DSEIS is new or materially different from that in the GEIS or [ER]."[383] Additionally, the NRC Staff asserts that the DSEIS does account for impacts were the EPA to deny Powertech's request for a Class V Underground Injection Control permit.[384]

With regard to the portion of Contention 13 dealing with impacts to wildlife, the NRC Staff argues that the U.S. Fish and Wildlife Service report on which the Oglala Sioux Tribe relies was released in 2007.[385] Therefore, the Staff contends,

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[375] *Id.*
[376] *Id.*
[377] *Id.* at 42-43.
[378] *Id.* at 43.
[379] *Id.*
[380] *Id.*
[381] *Id.*
[382] *Id.*
[383] *Id.* at 44.
[384] *Id.*
[385] *Id.*

this information was previously available and the Oglala Sioux Tribe should have submitted its arguments as challenges to the ER.[386]

Powertech, too, argues against the admission of Contention 13. With regard to the air emissions modeling argument, Powertech asserts that the Oglala Sioux Tribe does not demonstrate that its contention is based on new or materially different information.[387] Moreover, Powertech argues that if the Oglala Sioux Tribe was dissatisfied with the plan for Powertech to submit a final corrected inventory prior to the issuance of the FSEIS, the Oglala Sioux Tribe should have proposed a new contention noting such a disagreement prior to January 2013.[388]

Regarding the Oglala Sioux Tribe's concerns with wind data, Powertech argues that the FSEIS will include an appropriate and comprehensive model.[389] Additionally, Powertech states that the Oglala Sioux Tribe did not demonstrate that it is disputing information that is new or materially different from the license application, RAI responses, and other relevant parts of the record.[390] Moreover, to the degree that the Oglala Sioux Tribe took issue with the DSEIS's alleged failure to discuss foreseeable impacts related to major windstorms, Powertech asserts that this information is contained in its technical review and that the Oglala Sioux Tribe has not shown that this portion of Contention 13 is based on any new or materially different information.[391]

Powertech makes the same argument with regard to the Oglala Sioux Tribe's allegations regarding liquid waste disposition, namely that the Oglala Sioux Tribe has not demonstrated that this claim is based on new or materially different information as required by 10 C.F.R. § 2.309(c).[392] Relevant information, Powertech asserts, can be found in the GEIS.[393]

Finally, Powertech argues that the portions of the Oglala Sioux Tribe's contention regarding water quality and water treatment are not based on new or materially different information because these issues are addressed in Powertech's technical review RAI response.[394] Additionally, Powertech states that it is developing a plan regarding impacts to wildlife, the completed version of which the Oglala Sioux Tribe can challenge at a later time.[395] For these reasons, Powertech urges the Board to reject this contention.

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[386] *Id.* at 44-45.
[387] Powertech's Response at 26.
[388] *Id.* at 26-27.
[389] *Id.* at 27.
[390] *Id.*
[391] *Id.* at 28.
[392] *Id.*
[393] *Id.*
[394] *Id.*
[395] *Id.*

In its reply in support of its contention, the Oglala Sioux Tribe maintains that it has asserted an admissible contention.[396] It notes that NRC Staff's and Powertech's assertions that the contention is not timely because it is not based on new or materially different information should be rejected because "NRC Staff and Powertech ignore the holdings of this Board that contentions based solely on violations of NEPA are not ripe based on the application materials alone."[397]

2. Board Ruling

The Oglala Sioux Tribe argues that this is a contention of omission.[398] It states that the DSEIS addresses neither the quality of liquid wastes nor the impacts from their disposal. It also alleges the air modeling data cited in the DSEIS is flawed and a more detailed inventory of particulate emissions is necessary. Although this contention of omission is timely raised, it is nevertheless inadmissible because it does not meet the contention admissibility standards of § 2.309(f)(1).

As to the air emissions model, the Oglala Sioux Tribe's contention was timely because the revised mobile source inventory used to model air emissions first appeared in the DSEIS. It is irrelevant that it was based on data submitted to the Staff in July 2012. The use of the Powertech submission by the NRC Staff first occurred in the DSEIS. Contention 13 is not based on the 2012 RAI response, but is instead based on the fact that, in 2013, the DSEIS relied upon it. Although invervenors must respond to new information when it first becomes available, they need not do so until the information is actually used by the NRC Staff to form its conclusions on impacts in the DSEIS.

As to the assertion in this contention that the DSEIS omits analysis of air emissions, the Oglala Sioux Tribe overlooks section 4.7.1 and section C.2.1 of the DSEIS that describe the differences between the initial and revised emission inventory. The Oglala Sioux Tribe does not acknowledge the new inventory and argues that the prior inventory needs to be supplemented. Further, the Oglala Sioux Tribe's challenges to the DSEIS's sections discussing wind speed, wind direction, tornadoes, and other wind events are untimely because the Oglala Sioux Tribe fails to explain what information in these sections is new and how it is materially different from information previously available. The Board notes that the Oglala Sioux Tribe's original tornado contention (Contention 10) was rejected in LBP-10-16.[399]

The Oglala Sioux Tribe relies on Dr. Moran's Supplemental Declaration with

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[396] Oglala Sioux Tribe's Reply at 21.

[397] *Id.*

[398] Oglala Sioux Tribe's Proposed Contentions at 45.

[399] LBP-10-16, 72 NRC at 440-42.

regard to the liquid waste disposal issue.[400] This portion of the contention is inadmissible, however, because the information allegedly missing is contained in the GEIS. The GEIS discusses the RO process and related chemical processes (section 2.5.3), the use of reverse osmosis in aquifer applications (sections 2.5, 4.2, 4.3, 4.5), impacts on groundwater and waste management (sections 4.2.12.2, 4.2.4.2, 4.3.4.2.3), and recovery rates for treated water reused as permeate (sections 2.5.3 and 4.3.4.2.3). Because the Oglala Sioux Tribe fails to address information in the DSEIS and GEIS that is relevant to the issue it raises, the Board must reject the Oglala Sioux Tribe's arguments relating to liquid waste disposal.[401]

The Oglala Sioux Tribe further argues that the DSEIS fails to account for impacts if the EPA denies Powertech's application for a Class V Underground Injection Control permit. This is incorrect, however, because the DSEIS states that if Powertech's Class V application is denied, "the applicant would need to rely solely on land application disposal methods or seek an NRC amendment to approve another disposal option before it initiated operations."[402] The DSEIS next discusses alternative wastewater disposal methods, including evaporation ponds and discharge to surface waters.[403] The DSEIS thus summarizes impacts from these alternative methods and refers to the GEIS, which further discusses these alternatives.[404] For these reasons, the Oglala Sioux Tribe's arguments regarding the admissibility of its Class V permit denial concerns must be rejected.

Accordingly, for the reasons discussed above, the Board finds that the entirety of Contention 13 is inadmissible.

N. The Oglala Sioux Tribe's Proposed Contention 14: "The DSEIS Fails to Comply with NEPA with Regard to Impacts on Wildlife, and Fails to Comply with the Endangered Species Act and Migratory Bird Treaty Act"

1. Positions of the Parties

The Oglala Sioux Tribe's Contention 14 alleges that "[t]he DSEIS violates 10 C.F.R. §§ 51.10, 51.70, 51.71, and [NEPA] . . . and the Endangered Species

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[400] *See* Oglala Sioux Tribe's Proposed Contentions at 45 (citing Oglala Sioux Tribe's Proposed Contentions, Exh. 2, Supplemental Declaration or Dr. Robert E. Moran (Jan. 24, 2013) ¶¶ 52-53, 99-100).

[401] *Millstone*, CLI-01-24, 54 NRC at 358.

[402] DSEIS at 2-54.

[403] DSEIS §§ 2.1.1.2.1, 2.1.1.2.2; DSEIS tbl. 2.1-8.

[404] For example, the GEIS discusses impacts associated with evaporation ponds and surface water discharge in sections 4.4.3.1, 4.4.3.2, and 4.4.4.1. Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, NUREG-1910 (May 2009).

Act . . . by failing to conduct the required 'hard look' analysis at impacts of the proposed mine and . . . by failing to consult as required with the U.S. Fish and Wildlife Service."[405] In support of this contention, the Oglala Sioux Tribe cites the supplemental declaration of Dr. Moran.[406]

The Oglala Sioux Tribe asserts that section 7 of the Endangered Species Act "requires that agencies 'conference' with the [Fish and Wildlife Service] on any action that is 'likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat.'"[407] In this instance, the Oglala Sioux Tribe argues that "section 7 consultation was not completed, and impacts to imperiled species were not analyzed and reviewed."[408] The Oglala Sioux Tribe recognizes that certain species, including the greater sage grouse, have been identified in the DSEIS as a candidate species under the Endangered Species Act.[409] Despite this, the Oglala Sioux Tribe asserts, the DSEIS contains no NEPA analysis of the impacts to the greater sage grouse and "ignore[s] the studies and draft recommendations" relevant to this species that the Fish and Wildlife Service have issued.[410] "The result," the Oglala Sioux Tribe declares, "is that the DSEIS fails to provide the required analysis of the conservation objectives that could be adopted to protect the imperiled greater sage grouse, and its habitat."[411]

The Oglala Sioux Tribe also asserts that the DSEIS inappropriately concludes that "whooping cranes will not likely occur at the proposed site" despite the Fish and Wildlife Service's finding that they are expected to be found there.[412] The NRC Staff, the Oglala Sioux Tribe claims, has not sought consultation with the Fish and Wildlife Service.[413] When an agency's conclusions are different from the Fish and Wildlife Service's in this regard, the Oglala Sioux Tribe asserts, the agency must clearly articulate its reasons for disagreement.[414] This, the Oglala Sioux Tribe states, the NRC has not done.

The Oglala Sioux Tribe next argues that "[t]he DSEIS . . . forwards an unreasonably bounded analysis regarding the [b]lack-footed ferret" by concluding that construction would not affect current or future ferret populations because these species "are not present in the site vicinity" and that a nearby black-tailed

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[405] Oglala Sioux Tribe's Proposed Contentions at 50.
[406] *Id.* at 51.
[407] *Id.* (citing 50 C.F.R. § 402.10(a)).
[408] *Id.* at 53.
[409] *Id.*
[410] *Id.*
[411] *Id.*
[412] *Id.* at 54.
[413] *Id.*
[414] *Id.* at 55 (citing *Bennett v. Spear*, 520 U.S. 154, 169 (1997)).

prairie dog colony "is likely too small to support and sustain a breeding population of black-footed ferrets."[415] The Oglala Sioux Tribe asserts that this conclusion is inappropriate because the DSEIS does not demonstrate that the NRC Staff consulted with or obtained the concurrence of the Fish and Wildlife Service.[416]

Finally, the Oglala Sioux Tribe asserts that the consultation requirement of the Migratory Bird Treaty Act, in addition to that of NEPA, is not satisfied by the DSEIS "and cannot be deferred until a later stage of the licensing proceedings."[417] It also contends that the DSEIS does not appropriately examine the impacts on wildlife from waste disposal, particularly 11e(2) byproduct materials disposal, water disposal, and decommissioning activities.[418]

In response, NRC Staff states that "Contention 14 is a belated attempt to raise issues that could have been presented on Powertech's [ER]."[419] The ER, the NRC Staff claims, discusses wildlife that could be affected by the Dewey-Burdock project, and the Oglala Sioux Tribe should have raised its concern previously.[420]

In addition to its being late filed, the NRC Staff asserts the Board must reject Contention 14 because no error was made in the consultation process.[421] NRC Staff states that it consulted with the Fish and Wildlife Service as early as March 2010 and determined that the Project would not affect listed species. Therefore, the NRC Staff maintains, a formal section 7 consultation was not required because "this section applies only where threatened and endangered species or critical habitats are present and impacts on a species are expected as a result of the proposed project."[422] The Oglala Sioux Tribe, the NRC Staff asserts, fails to address the DSEIS's explanation that a section 7 consultation was not required, and, therefore, there is no basis for admitting this portion of Contention 14.[423]

Finally, the NRC Staff declares that the Oglala Sioux Tribe did not "address other documents showing the Staff ha[d] consulted on wildlife issues with [the Bureau of Land Management] and South Dakota Game, Fish and Parks Division . . . and accepted recommendations from both agencies."[424] The NRC Staff states that the Oglala Sioux Tribe must do more than merely allege that the DSEIS's treatment of these issues is inadequate; "it must evaluate the underpinnings of

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[415] *Id.*
[416] *Id.*
[417] *Id.* at 56.
[418] *Id.* at 57.
[419] NRC Staff's Answer at 45.
[420] *Id.*
[421] *Id.*
[422] *Id.* at 46 (citing 50 C.F.R. §§ 402.02, 402.13).
[423] *Id.*
[424] *Id.* at 47.

the DSEIS analysis and provide specific support for its claims."[425] This, the NRC Staff claims, the Oglala Sioux Tribe did not do.[426]

In its response, Powertech argues that Contention 14 should be rejected because it does not consider all the information contained in the DSEIS that relates to the section 7 consultation process, consultation with other agencies, and threatened and endangered species.[427]

Powertech also argues that the NRC Staff conducted an informal consultation with the Fish and Wildlife Service and the latter "concluded that there are no federally threatened or endangered species within 1.0 mile of the proposed Dewey-Burdock project area."[428] This determination, Powertech explains, does not require additional analysis.[429] Additionally, Powertech notes that the Fish and Wildlife Service has an opportunity to comment on the DSEIS, and maintains that the NRC Staff will respond accordingly to any such comments.[430] Powertech asserts that Contention 14 is, therefore, untimely, because it could have been filed based on previously released information and does not satisfy the standards set forth in 10 C.F.R. § 2.309(c).[431]

In response to the Oglala Sioux Tribe's assertion that threatened and endangered species analyses are not addressed in the DSEIS, Powertech cites numerous portions of the DSEIS that, it claims, contain the allegedly omitted analyses.[432] Specifically, Powertech cites to portions of the DSEIS that analyze the status of the greater sage grouse.[433] It further asserts that information regarding this species was contained in the license application and, therefore, the Oglala Sioux Tribe should have filed this contention at an earlier time.[434] Powertech makes similar arguments regarding the whooping crane, noting that the DSEIS addresses this species and asserting that the Oglala Sioux Tribe has not demonstrated that its allegations satisfy the standards for new and amended contentions.[435] With regard to the black-footed ferret, Powertech argues that the Oglala Sioux Tribe's

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[425] *Id.*

[426] *Id.*

[427] Powertech's Response at 29 (referencing, as an example, DSEIS § 1.7.1).

[428] *Id.* at 29. The NRC Staff explains that this determination was also indicated in two letters from the Fish and Wildlife Service dated March 29, 2010, and August 27, 2012. *Id.* at 30.

[429] *Id.*

[430] *Id.*

[431] *Id.*

[432] *Id.* at 30-31.

[433] *Id.* at 31.

[434] *Id.*

[435] *Id.*

allegation goes against current practice because surveys on this species are not required in South Dakota.[436]

Concerning the Oglala Sioux Tribe's argument regarding the Migratory Bird Treaty Act, Powertech reiterates that the NRC Staff concluded that an informal consultation, rather than a formal section 7 consultation, was sufficient for the Fish and Wildlife Service to make relevant determinations. Additionally, Powertech notes that "[t]he DSEIS commits several lines of discussion to potential impacts to migratory birds . . . and such analysis is subject to additional public comments should [the Fish and Wildlife Service] deem it appropriate."[437] For these reasons, Powertech asserts that Contention 14 must be rejected.

In reply, the Oglala Sioux Tribe argues that NRC Staff's and Powertech's assertions that the contention is late filed are "undermined by the fact that . . . the DSEIS admits that it lack[s] necessary information."[438] Additionally, the Oglala Sioux Tribe notes that Powertech previously stated that the determinations regarding impacts to wildlife would be provided in the DSEIS.[439] Therefore, the Oglala Sioux Tribe contends that it could not be expected to file a contention based on information it was told would be available only in the DSEIS.[440] The Oglala Sioux Tribe accordingly maintains that Contention 14 is adequately supported and admissible.[441]

2. Board Ruling

Contention 14 can be broken down into three primary components: (1) the Endangered Species Act's section 7 consultation process was not conducted adequately; (2) impacts to threatened and endangered species, including the greater sage grouse, the whooping crane, and the black-footed ferret, were not sufficiently assessed; and (3) the DSEIS does not adequately consider the Migratory Bird Treaty Act.

The Board finds that the first component — the adequacy of NRC's consultation process — meets the good cause standard for new and amended contentions filed after the initial deadline. Although, as NRC Staff and Powertech point out, bits and pieces of the information upon which the contention is based were previously available in some form in documents exchanged between the NRC Staff and the Fish and Wildlife Service, the adequacy, vel non, of the interagency consultation process does not hinge on each e-mail between them. Intervenors

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[436] *Id.* at 31-32.
[437] *Id.* at 32.
[438] Oglala Sioux Tribe's Reply at 22 (citing Oglala Sioux Tribe's Proposed Contentions at 53).
[439] *Id.*
[440] *Id.*
[441] *Id.*

cannot be expected to raise a claim each time a document is created relating to a proceeding, especially if that document is a mere part of a larger, arguably incomplete, process. In this case, a March 15, 2010 letter,[442] a March 29, 2010 letter,[443] and an August 27, 2012 e-mail[444] evidence the informal consultation process conducted between the NRC Staff and the Fish and Wildlife Service. The Board does not expect intervenors to raise a concern regarding each portion of the process, but instead notes that, in situations such as this, intervenors need not file a contention until all relevant parts of a process are completed. And in that regard, as the Board explains in more detail below, neither Powertech nor the NRC Staff point to documentation that demonstrates that the Fish and Wildlife Service *concurred* in the Staff's findings resulting from the information consultation process, a regulatory requirement that completes the informal consultation process. Furthermore, the documentation the NRC Staff and Powertech cite to support their responses in opposition to the admission of Contention 14 do not even suggest an end to the process until well after the deadline for the timely submission of the Oglala Sioux Tribe's contentions in April 2010. Therefore, the Oglala Sioux Tribe could not have proffered this argument in response to the application as part of its prior set of proposed contentions. Accordingly, the Board determines that the portion of this Oglala Sioux Tribe contention regarding the section 7 consultation process meets the good cause standard for late-filed contentions found in 10 C.F.R. § 2.309(c) because it is based on information that was not previously available and that is materially different from previously available information and because it was filed by the deadline set forth in the Board's scheduling order.[445]

To be admissible, this portion of the contention must not only meet the standards set forth in 10 C.F.R. § 2.309(c), but it also must meet the admissibility standards of 10 C.F.R. § 2.309(f)(1). The essence of the Oglala Sioux Tribe's claim is that the required consultation process was not completed. According to implementing regulations, the NRC must consult with the applicable entity, here the Fish and Wildlife Service, regarding the presence of listed species or critical habitat at the relevant site and the impacts the proposed project will have on those species and habitat. If the NRC engages in an informal consultation and it

[442] Letter from Kevin Hsueh, Chief, Environmental Review Branch, Office of Federal and State Materials and Environmental Management Programs, NRC, to Pete Gober, Fish and Wildlife Conservation Office (Mar. 15, 2010) (ADAMS Accession No. ML100331503).

[443] Letter from Scott Larson, Acting Field Supervisor, South Dakota Field Office, to Kevin Hsueh, NRC (ADAMS Accession No. ML100970556).

[444] E-mail from Terry Quesinberry, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, to Amy Hester, Research Scientist, Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute (ADAMS Accession No. ML12240A317).

[445] *See* 10 C.F.R. § 2.309(c)(1).

is determined that the project will not adversely affect listed species or critical habitat, it need not engage in formal consultation. The implementing regulation, 50 C.F.R. § 402.13, explains:

> Informal consultation is an optional process that includes all discussions, correspondence, etc., between the Service and the Federal agency or the designated non-Federal representative, designed to assist the Federal agency in determining whether formal consultation or a conference is required. If during informal consultation it is determined by the Federal agency, *with the written concurrence of the Service*, that the action is not likely to adversely affect listed species or critical habitat, the consultation process is terminated, and no further action is necessary.[446]

Here, as the Board has noted previously, Powertech and the NRC Staff point to several documents that evidence an exchange between the NRC and the Fish and Wildlife Service that, they claim, fulfill the requirements of the informal consultation process. The NRC Staff and Powertech reference two letters and one e-mail that they assert demonstrate that the NRC was engaged in conversations with the Fish and Wildlife Service about the Project's impact on listed species and habitat. The August 27, 2012, e-mail from the NRC Staff to the Fish and Wildlife Service explains that the NRC Staff concluded "that a biological assessment or Section 7 consultation under the Endangered Species Act are not warranted for this proposed project because no adverse effects to federally threatened, endangered, or candidate species are expected. The bases for [this] determination will be provided in the draft SEIS."[447] Despite this conclusion, neither Powertech nor the NRC Staff points to documentation that demonstrates that the Fish and Wildlife Service *concurred* in this finding, a regulatory requirement that completes the informal consultation process. Accordingly, based on the information before us, the Board cannot determine whether the informal consultation process was completed. Further, to the extent that the DSEIS's impacts analyses are tied to the adequacy of the consultation process, the Board is unable to discern whether the DSEIS's impacts analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

Given this, the Board finds that the portions of Contention 14 relevant to the completion of the section 7 consultation process and the adequacy of the NRC Staff's impact analyses relevant to the three named species meet the admissibility standards of 10 C.F.R. § 2.309(f)(1). The Oglala Sioux Tribe has (1) provided a specific statement of the issue, (2) provided a brief explanation of the basis of the

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[446] 50 C.F.R. § 402.13(a) (emphasis added).

[447] E-mail from Terry Quesinberry, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, to Amy Hester, Research Scientist, Center for Nuclear Waste Regulatory Analyses, Southwest Research Institute (ADAMS Accession No. ML12240A317).

contention, (3) demonstrated that the issue is within the scope of this proceeding, (4) demonstrated that the issue is material to the findings the NRC must make to approve the application, (5) provided a concise statement of the alleged facts that support its position on the issue, and (6) shown that a genuine dispute exists with the applicant on a material issue of law and fact.[448] Accordingly, as is set forth in Appendix A to this opinion, these portions of Contention 14 are admitted in the following form: 14A — Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations; and 14B — Whether the DSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.[449]

Insofar as the Oglala Sioux Tribe's second claim — that the DSEIS does not adequately assess the impacts to threatened and endangered species — is separate from its concern that the consultation process was not completed, resulting in an inadequate impacts analysis, the Board finds that its arguments in support of this aspect of the contention do not meet the contention admissibility standards of 10 C.F.R. § 2.309(f)(1)(v) and (vi) because the Oglala Sioux Tribe failed to present its claim with sufficient detail and support and failed to demonstrate that there exists a genuine dispute as to this issue. Accordingly, to the extent that the Oglala Sioux Tribe proffers concern regarding threatened and endangered species that is separate from its arguments regarding the consultation process and the above-named animals, that claim is rejected.

The Board finds that the Oglala Sioux Tribe's third claim in Contention 14 — that the NRC Staff did not engage in the consultation process relevant to issues addressed by the Migratory Bird Treaty Act and that the impacts to wildlife with respect to this Act are inadequately analyzed — is likewise inadmissible. To the extent that the Oglala Sioux Tribe continues to argue that a proper consultation process was not conducted, this has been addressed *supra.* Insofar as the Oglala Sioux Tribe is making additional claims related to the MBTA, the Board finds that it has not provided a sufficient explanation of its concern nor has it provided a concise statement of the alleged facts supporting its position, as required by 10 C.F.R. § 2.309(f)(1)(ii) and (v), respectively.[450] It is not the responsibility of the Board to read between the lines of a filing to glean the essence of an intervenor's contention. Accordingly, this portion of Contention 14 is rejected.

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[448] *See* 10 C.F.R. § 2.309(f)(1)(i)-(vi).

[449] The Board notes that Applicant and the NRC Staff may respond to this contention with an appropriate motion for summary disposition if documentation or other information exists that would moot the reformulated Contention 14.

[450] Where contentions are defective for whatever reason, licensing boards have no duty to make them acceptable under 10 C.F.R. § 2.309 (formerly section 2.714). *Commonwealth Edison Co.* (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974).

O. Consolidated Intervenors' Proposed DSEIS Contention A: "Failure to Meet Applicable Legal Requirements Regarding Protection of Cultural Resources, and Failure to Involve or Consult All Interested Tribes as Required by Federal Law"

1. Positions of the Parties

In proposed DSEIS Contention A, Consolidated Intervenors complain of the DSEIS's "failure to meet applicable legal requirements regarding protection of cultural resources, and failure to involve or consult all interested tribes as required by federal law."[451] Consolidated Intervenors argue that the DSEIS "lacks an adequate description of either the affected environment or the impacts of the project on archaeological, historical, and traditional cultural resources" in contravention of requirements contained in NEPA, the National Historic Preservation Act (NHPA), and the provisions of 40 C.F.R. Part 51.[452] Specifically, Consolidated Intervenors allege that, because no subsurface testing was conducted, many cultural resources have not been located so as to be properly evaluated.[453] Therefore, they maintain that the DSEIS's classification of impacts as "small" is premature.[454] Furthermore, they contend that certain tribes were not consulted in connection with the proposed Dewey-Burdock Project ISL uranium mine, which violates the NHPA's requirement that all interested tribes be contacted with regard to projects such as the one at issue.[455]

In response, the NRC Staff argues that the contention is inadmissible because it was filed after the initial hearing petition deadline and does not meet the good cause standards of section 2.309(c). Specifically, the NRC Staff argues that Consolidated Intervenors "do not point to any new and materially different information in the DSEIS as support for their contentions."[456] The NRC Staff argues that the DSEIS's analysis is based on survey results that were submitted with Powertech's application and, therefore, the information is not new.[457] However, the NRC Staff notes that, as explained in the DSEIS, the Staff is conducting a field survey of the site to gather additional information on historic properties.[458] Once this is complete and the DSEIS has been properly supplemented and circulated for comment, the NRC Staff suggests that Consolidated Intervenors may file a

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[451] Consolidated Intervenors' Proposed Contentions at 2.
[452] *Id.* at 2.
[453] *Id.* at 2-3.
[454] *Id.* at 3.
[455] *Id.* at 6-7.
[456] Staff's Answer at 12.
[457] *Id.* at 13.
[458] *Id.*

contention if they dispute the analysis contained therein.[459] Therefore, though not currently timely pursuant to the standards set out in 10 C.F.R. § 2.309(c), the NRC Staff concedes that a similar contention could meet the timeliness standards at a later date.

Additionally, with regard to the portion of the contention alleging that certain tribes have not been adequately consulted, the NRC Staff notes that, beginning in 2010, letters have been sent to tribes inviting them to be involved in the Dewey-Burdock Project consultation process.[460] These letters are public and, therefore, the Staff contends, could have been the basis of a contention at a previous time, but the time to file such a challenge has since expired.[461] Accordingly, the NRC Staff argues, there is no new or materially different information related to this portion of Consolidated Intervenors' contention that would make it timely under the regulations.

Powertech's response to Consolidated Intervenors' DSEIS Contention A echoes the response of the NRC Staff. First, Powertech asserts that the portion of DSEIS Contention A regarding the survey of cultural resources is not yet ripe for review because the NHPA § 106 process is not yet complete and will be finally resolved either as part of the NEPA process in the FSEIS or as an independent Memorandum of Agreement.[462]

Additionally, Powertech argues that the portion of DSEIS Contention A alleging that certain tribes have not been consulted does not meet the late-filed contention requirements because the list of Tribes to be consulted has been available since August 2012.[463] Therefore, the contention should have been filed prior to January 2013 to be deemed "timely" in accordance 10 C.F.R. § 2.307.[464]

In reply, Consolidated Intervenors support the timeliness of this contention by asserting it was filed on the deadline for filing challenges to the DSEIS set forth in the Board's scheduling order.[465] Consolidated Intervenors reason that, because their new proposed contentions, including Contention A, were filed before the applicable deadline, the timeliness standards established in the regulations should not preclude their admission — "Because of the exception for the DSEIS contentions in the Scheduling Orders, the usual rules concerning

[459] *Id.*
[460] *Id.*
[461] *Id.*
[462] Powertech's Response at 8.
[463] *Id.* at 9.
[464] *Id.*
[465] Consolidated Intervenors' Reply at 1.

'late-filed contentions' do not apply to the DSEIS contentions filed on January 25, 2013."[466]

Furthermore, Consolidated Intervenors challenge the NRC Staff's and Powertech's ripeness arguments by arguing that, once the DSEIS was issued, Consolidated Intervenors consulted their expert who compared the DSEIS to available research and ultimately opined that three interested tribes had not been consulted.[467] In their reply, however, Consolidated Intervenors do not address their ripeness arguments made with regard to the ongoing section 106 process relative to the additional Staff cultural resource surveys.

2. Board Ruling

Consolidated Intervenors' Proposed DSEIS Contention A bears a marked resemblance to portions of Consolidated Intervenors' original Contention K, which was admitted by the Board in LBP-10-16.[468] To the extent Consolidated Intervenors' proposed DSEIS Contention A challenges the sufficiency of the DSEIS as it pertains to the protection of cultural resources it falls within the migration tenet and is admissible. The NRC Staff states that it is working to facilitate a field survey of the Dewey-Burdock site to obtain additional information on historic properties[469] and, when that survey is complete, it "will supplement its analysis in the DSEIS and circulate the new analysis for public comment.[470] However, to the extent proposed Contention A challenges the ongoing consultation obligations undertaken by the NRC Staff as part of the Section 106 process, the contention is not ripe because the section 106 process is not yet complete. As such, this portion of the contention is premature and inadmissible.

As noted *supra*,[471] the Board will consolidate the portions of admitted contentions that meet the migration tenet. The protection of cultural and historical resources and adequacy of consultation with the Native American tribes are two issues that have already been admitted in this proceeding. The concerns about

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[466] *Id.* at 2. Consolidated Intervenors specifically point to the Staff's recognition of the Board's scheduling orders, wherein it explains: "[T]he Board has issued two scheduling orders addressing the timeliness of contentions. Under these orders the Intervenors must submit contentions within 30 days after relevant information becomes available. . . . The exception is the DSEIS, which the Intervenors were given until January 25, 2013, to challenge." *Id.* (citing Staff's Answer at 7). *See* Licensing Board Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) at 3 (Oct. 16, 2012) ("[T]he parties will have 45 days following the issuance of the DSEIS to file new or amended contentions.").

[467] Consolidated Intervenors' Reply at 4.

[468] LBP-10-16, 72 NRC at 416-18.

[469] Notice of Availability of DSEIS at 1-2 (Nov. 15, 2012) (ADAMS Accession No. ML12320A623).

[470] Staff's Answer at 13.

[471] *See supra* Part III.B.

the protection of historic and cultural resources and the adequacy of consultation with the Native American tribes have "migrated," as these previously admitted issues now appear in relation to the DSEIS. The Board finds that this contention is not time barred and is a migration of the concerns originally raised in response to the Powertech ER. For efficiency and to clarify this contention the Board will combine the multiple iterations of the Consolidated Intervenors' contention with the corresponding contention of the Oglala Sioux Tribe into a single contention for hearing, the terms of which are set forth in Appendix A to this decision.[472]

P. Consolidated Intervenors' Proposed DSEIS Contention B: "The DSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality"

1. Positions of the Parties

In Consolidated Intervenors' proposed DSEIS Contention B, Consolidated Intervenors argue that "the DSEIS fails to include necessary information for adequate determination of baseline ground water quality."[473] Consolidated Intervenors argue that NRC regulations and NEPA require the DSEIS to demonstrate the Staff's consideration of alternatives, methods and sources used in its analysis, and supportive resources and evidence.[474] They assert that NRC regulations and NEPA "require a description of the affected environment containing sufficient data to aid the Commission in its conduct of an independent analysis" as well as "complete baseline data on a milling site and its environs."[475] They also point to certain NUREG provisions that require proper assessment of groundwater with regard to the proposed site using certain methodologies.[476] Moreover, Consolidated Intervenors state that "[t]he establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process."[477] Based on the supplemental declaration of Dr. Robert E. Moran as support, Consolidated Intervenors argue that the DSEIS lacks "scientifically defendable-analysis . . . regarding potential impacts to ground water associated with the proposed Project."[478]

In response to this contention, the NRC Staff argues that Consolidated Inter-

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[472] 10 C.F.R. §§ 2.316, 2.333, 2.319.

[473] Consolidated Intervenors' Proposed Contentions 7.

[474] *Id.* at 7.

[475] *Id.* at 8.

[476] *Id.* at 8-9.

[477] *Id.* at 9.

[478] *Id.* at 10; *see id.* at 10-19 (discussing portions of Dr. Moran's declaration that detail the omitted analysis relevant to baseline water quality).

venors' proposed DSEIS Contention B fails to meet the timeliness requirements of 10 C.F.R. § 2.309(c) because it is not based on new or materially different information.[479] To support this, NRC Staff points out that the portions of Dr. Moran's declaration cited by Consolidated Intervenors "merely restate arguments from his original Declaration, with DSEIS references substituted for reference to Powertech's application."[480] The NRC Staff also argues that Powertech submitted additional baseline groundwater data in June of 2011, and that Consolidated Intervenors were obligated to file a challenge to this information within 30 days of the submission.[481] The NRC Staff argues that the information released in June 2011, which has been incorporated into the DSEIS, cannot now be challenged by Consolidated Intervenors because it is no longer "new."[482]

Finally, the NRC Staff argues that Consolidated Intervenors misread the DSEIS because they challenge portions of the DSEIS that relate to the "groundwater monitoring programs that Powertech will implement during ISR *operations*."[483] The programs the Consolidated Intervenors highlight as nonresponsive to regulations, the NRC Staff states, are not intended to establish baselines.[484] For these reasons, the NRC Staff urges the Board to find this contention inadmissible.

In Powertech's response to Consolidated Intervenors' proposed DSEIS Contention B, the Applicant argues that this contention fails to satisfy the timeliness standards of 10 C.F.R. § 2.309(c)(i)-(ii) that require the information upon which a new or amended contention is based to be new or materially different from previously available information.[485] Powertech argues each portion of DSEIS Contention B relates to information that was available before the issuance of the DSEIS.[486] Therefore, Powertech declares, Consolidated Intervenors should have filed their grievances prior to the issuance of the DSEIS so that proposed DSEIS Contention B should be rejected for failure to timely file.[487]

In their reply, Consolidated Intervenors repeat arguments they made in defense of proposed DSEIS Contention A, namely that the NRC Staff's and Powertech's arguments regarding timeliness should fail because the contention was submitted before the Board's deadline to file new or amended contentions related to the DSEIS.[488] Additionally, Consolidated Intervenors maintain in their reply that their

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[479] Staff's Answer at 16.
[480] *Id.* at 16-17.
[481] *Id.* at 16.
[482] *Id.* at 17.
[483] *Id.*
[484] *Id.*
[485] Powertech's Response at 9.
[486] *Id.* at 10.
[487] *Id.*
[488] Consolidated Intervenors' Reply at 2.

proposed contentions, including DSEIS Contention B, meet each of the contention admissibility standards of 10 C.F.R. 2.309(f)(1).[489]

2. Board Ruling

Those portions of proposed DSEIS Contention B that challenge the technical adequacy of baseline water quality data and adequate confinement of the host aquifer are admissible. Proposed DSEIS Contention B is *in para materia* to previously admitted contention D in LBP-10-16. The Consolidated Intervenors' declarant, Dr. Moran, states at page 20 of his Declaration, that "the 2009 Powertech Application, carried forward in the DSEIS, includes what it incorrectly calls baseline."[490] To the extent the Consolidated Intervenors challenge the adequacy of the baseline water quality data and raise questions about the confinement of the host aquifer, these issues were admitted in LBP-10-16 and migrate. However, to the extent the Consolidated Intervenors seek to expand the scope of the previously admitted contention, such expansion is denied. Further, the Board will merge this contention with previously admitted Consolidated Intervenors' Contention D and the Oglala Sioux Tribe's original Contention 2 and DSEIS Contention 2, as discussed above.[491]

Q. Consolidated Intervenors' Proposed DSEIS Contention C: "The DSEIS Fails to Include an Adequate Hydrogeological Analysis to Assess Adequate Confinement and Potential Impacts to Groundwater"

1. Positions of the Parties

Consolidated Intervenors' proposed DSEIS Contention C alleges that "the DSEIS fails to include an adequate hydrogeological analysis to assess adequate confinement and potential impacts to groundwater."[492] To support this contention, Consolidated Intervenors claim that NRC regulations and NEPA "require each Draft EIS to include a description of the affected environment and the impact of the proposed project on the environment, with sufficient data to enable the agency and the public to assess and review the potential impacts associated with the proposed mine."[493] Consolidated Intervenors then point to NUREG provisions that discuss

[489] *Id.* at 3.

[490] Oglala Sioux Tribe's Proposed Contentions, Exh. 2, Supplemental Declaration or Dr. Robert E. Moran (Jan. 24, 2013), at 20.

[491] *See supra* Part IV.B.

[492] Consolidated Intervenors' Proposed Contentions at 19.

[493] *Id.* at 19 (discussing 10 C.F.R. §§ 51.10, 51.70, 51.71, and NEPA).

the manner in which an applicant should collect and present hydrogeological data.[494] And in that regard, Consolidated Intervenors assert that the "DSEIS fails to present sufficient information in a scientifically defensible manner to adequately characterize the site and off-site hydrogeology to enable a meaningful review of the potential impacts of the proposed mine" in contravention of NEPA, NRC regulations, and NUREG provisions.[495]

Consolidated Intervenors also declare that the NRC Staff improperly relies on the Applicant's commitment to perform future actions to support its conclusions in the DSEIS.[496] According to Consolidated Intervenors this reliance, and the related lack of data, "undermines the public's (and the agencies') ability to understand and evaluate the potential impacts of the operation."[497] By way of example, Consolidated Intervenors argue that, rather than requiring that data be collected to determine the impacts of mining in an area where the Fall River aquifer is not hydrogeologically confined, the Staff relies on the Applicant's commitment, contained in a license condition, to conduct investigations into this matter.[498] To support this and the other details of this contention, Consolidated Intervenors cite to specific portions of Dr. Moran's declaration that identify and describe the areas in the DSEIS that lack data and analysis required by regulation and statute.[499] For the above reasons, Consolidated Intervenors submit that this contention is a contention of omission and should be admitted.

In response, the NRC Staff and Powertech assert that proposed DSEIS Contention C is inadmissible because it is not based on new or materially different information as required by 10 C.F.R. § 2.309(c).[500] Specifically, the NRC Staff claims that the portions of Dr. Moran's declaration cited by Consolidated Intervenors either reiterate arguments previously made in relation to the application or reference information from Powertech's supplements to its application.[501] Therefore, the NRC Staff maintains, Consolidated Intervenors have not demonstrated the new information on which to base their Contention C.[502]

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[494] *Id.* at 20 (discussing NUREG-1569).

[495] *Id.* Consolidated Intervenors argue that "[t]hese deficiencies include unsubstantiated assumptions as to the isolation of the aquifers in the ore-bearing zones and failure to account for natural and man-made hydraulic conductivity through natural breccias pipe formations and the historic drilling of literally thousands of drill holes in the aquifers and ore-bearing zones in question, which were not properly abandoned." *Id.*

[496] *Id.* at 21-22.

[497] *Id.* at 22.

[498] *Id.*

[499] *Id.* at 22-26.

[500] NRC Staff's Answer at 18; Applicant's Response at 12.

[501] NRC Staff's Answer at 18.

[502] *Id.*

Additionally, the NRC Staff argues that Contention C "rest[s] on an incomplete reading of the DSEIS."[503] For example, the Staff contends that Dr. Moran's allegation that the "DSEIS fails to provide detailed information on the hydrogeologic performance of the bounding geologic units in the Dewey-Burdock area" cites only two pages in the DSEIS and overlooks "broad sections of the DSEIS that provide the very data he claims are missing."[504]

In response to Consolidated Intervenors' argument that the DSEIS improperly relies on Powertech's commitment to future action, the NRC Staff states that relying on a license condition in the DSEIS "is consistent with Commission precedent and NRC regulations."[505] Further, the NRC Staff argues that some of the regulations Consolidated Intervenors cite to support their claim of omitted information — specifically 10 C.F.R. Part 40, Appendix A, Criteria 4(e) and 5G(2) — refer to safety criteria that apply to applicants and licensees and are not relevant to the NEPA review.[506] Moreover, the Staff declares, the specific regulations cited concern conventional milling, not in situ recovery activities.[507] Accordingly, the NRC Staff asserts that DSEIS Contention C should be found inadmissible.

In reply, Consolidated Intervenors take the same stance as with their other contentions, reiterating that the proposed DSEIS Contention C is timely filed because it met the relevant deadline contained in the Board's scheduling order and that it is admissible because it meets the standards set forth in 10 C.F.R. § 2.309(f)(1).[508]

2. Board Ruling

Consolidated Intervenors' proposed DSEIS Contention C bears a marked resemblance to portions of Consolidated Intervenors' Contention E (merged with Contention J), which was admitted in LBP-10-16.[509] To the extent Consolidated Intervenors' proposed DSEIS Contention C challenges the failure of the DSEIS to include an adequate hydrological analysis to assess adequate confinement

[503] *Id.* at 19.

[504] *Id.*

[505] *Id.* at 20 (citing *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 17 (1999)).

[506] *Id.* at 20.

[507] *Id.*

[508] Consolidated Intervenors' Reply at 1-3.

[509] LBP-10-16, 72 NRC at 407.

and potential impacts to groundwater, it falls within the migration tenet and is admissible.[510]

R. Consolidated Intervenors' Proposed DSEIS Contention D: "The DSEIS Fails to Adequately Analyze Ground Water Quantity Impacts"

1. Positions of the Parties

Consolidated Intervenors' fourth and final proposed contention, Contention D, asserts that "the DSEIS fails to adequately analyze ground water quantity impacts" in contravention of NRC regulations and NEPA.[511] Additionally, Consolidated Intervenors contend that "the DSEIS presents conflicting information on ground water consumption such that the water consumption impacts of the project cannot be accurately evaluated."[512]

To support these assertions, Consolidated Intervenors quote the declaration of Dr. Moran at considerable length.[513] Among other things, they highlight his opinions that (1) although the site, located in a semi-arid area, will use considerable amounts of water, the DSEIS provides no reliable estimates for the volumes and sources of water to be used; (2) no data are provided for the volume of groundwater to be used in phases other than the construction phase; and (3) when calculated using current data, the volume of groundwater used over the course of the project will be very large, and the Applicant has not investigated the impact this may have on area groundwater levels.[514] Relying on these opinions, Consolidated Intervenors argue that the DSEIS does not meet NEPA and the relevant regulations that "require the agency to provide sufficient data for a scientifically defensible review of the environmental impacts of the operation and for the Commission to conduct an independent analysis."[515]

In response to this contention, the NRC Staff states Consolidated Intervenors have failed to demonstrate how the information in the DSEIS with which they take issue is materially different from previously available information.[516] The data in the DSEIS, the NRC Staff explains, were previously submitted in the ER

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[510] LBP-10-16 also modified Consolidated Intervenors' Contention D so that it addressed, in part, aquifer confinement. *Id.* at 403-04.

[511] Consolidated Intervenors' Proposed Contentions at 26. Specifically, Consolidated Intervenors contend that this violates 10 C.F.R. §§ 51.10, 51.70, 51.71.

[512] *Id.* at 26.

[513] *Id.* at 27-29.

[514] *Id.*

[515] *Id.* at 27.

[516] Staff's Answer at 21.

and in the supplements to Powertech's application, and the time within which to challenge the information contained in either the ER or the supplements has lapsed.[517]

In addition, the NRC Staff contends that Consolidated Intervenors' contention relies on an incomplete or inaccurate reading of the DSEIS.[518] For example, the NRC Staff asserts that the pages Dr. Moran cites do not support his claim and that he overlooks certain portions of the DSEIS that provide the information he claims has been omitted.[519]

Powertech also argues that Consolidated Intervenors' Contention D is not based on new or materially different information in contravention of 10 C.F.R. § 2.309(c).[520] Specifically Powertech argues, as it did with Consolidated Intervenors' Contentions A through C, that the allegations brought forth in this contention are based on information that was incorporated into the first draft license and the RAI responses, or could be found elsewhere in the public record.[521] Therefore, Powertech states Contention D should be found inadmissible.

In their reply in support of Contention D, Consolidated Intervenors argue, as they did with Contentions A through C, that the contention is timely because it meets the deadline set forth in the Board's scheduling orders.[522] Additionally, Consolidated Intervenors assert that Contention D, like Contentions A though C, meets the contention admissibility standards of 10 C.F.R. § 2.309(f)(1).[523]

2. Board Ruling

Consolidated Intervenors' proposed DSEIS Contention D is similar to Consolidated Intervenors' original Contention F.[524] Consolidated Intervenors' Contention F was rejected by the Board in LBP-10-16 because it lacked support.[525] In response to the publication of the DSEIS, however, the Consolidated Intervenors again put forth a contention that challenges the sufficiency of analysis of groundwater quantity impacts. The Board must, once again, reject this contention because the Consolidated Intervenors fail to explain how the information in the DSEIS is materially different from the information contained in Powertech's Environmental Report. Therefore, this contention is impermissibly late. Consolidated

[517] *Id.*
[518] *Id.*
[519] *Id.* at 21-22 (citing DSEIS at 4-57 to 4-60; 4-64 to 4-65; 4-70 to 4-71).
[520] Powertech's Response at 12.
[521] *Id.* at 13.
[522] Consolidated Intervenors' Reply at 1-3.
[523] *Id.* at 3.
[524] *See* LBP-10-16, 72 NRC at 407.
[525] *Id.* at 407-08.

Intervenors' DSEIS Contention D cannot be admitted because it does not meet the requirements of section 2.309(c)(1). Further, as was the case with Consolidated Intervenors' original Contention F, this contention lacks adequate support to establish a genuine dispute exists on a material legal or factual issue so that its admission is precluded under section 2.309(f)(1)(vi) of the Commission's regulations.

The Board nonetheless notes that the Oglala Sioux Tribe raised a similar contention concerning the issue of groundwater quantity impacts in their original Contention 4 and the Board admitted it.[526] The Board has now admitted, via the migration tenet, the Oglala Sioux Tribe's Contention 4 filed in response to the publication of the DSEIS that raises essentially the same issue.[527] Therefore, the matter of adequate analysis of water quantity impacts under NEPA will be considered in the evidentiary hearing.

V. CONCLUSION

By this Order the Board combines and consolidates the contentions filed by the Oglala Sioux Tribe and the Consolidated Intervenors, which were admitted in response to the 2010 notice of opportunity for hearing (original contentions) and addressed in LBP-10-16, with the admitted contentions filed in 2013 in response to the publication of the DSEIS (DSEIS contentions). The following Table summarizes our contention admissibility holdings to date:

Table of Admitted Contentions
Dewey-Burdock In-Situ Recovery Facility

Topic[528]	**Oglala Sioux Original-2010**	**Oglala Sioux DSEIS-2013**	**Consolidated Intervenors Original-2010**	**Consolidated Intervenors DSEIS-2013**	**Combined**
Historical & cultural resources	1	1	K	A	1-A
Failure to consult	1	1	—	—	1-B
Groundwater quality	2	2	D	B	2

Continued

[526] *See id.* at 426-28.

[527] *See supra* Part IV.D.

[528] The statement of the admitted contention going forward is contained in the Board's Order, *infra* Part VI, and in Appendix A.

Topic	Oglala Sioux Original-2010	Oglala Sioux DSEIS-2013	Consolidated Intervenors Original-2010	Consolidated Intervenors DSEIS-2013	Combined
Hydrogeological information	3	3	E and J	C	3
Groundwater quantity impacts	4	4	F*	D*	4
Mitigation measures	—	6	—	—	6
Connected actions	—	9	—	—	9
Consultation on Endangered Species Act	—	14	—	—	14A
Sufficiency of impact analyses	—	14	—	—	14B

*These contentions were rejected by the Board, but are included here for completeness.

VI. BOARD ORDER

A. As this case proceeds toward evidentiary hearing, the Board, exercising its obligation to conduct a fair and impartial hearing and to manage the hearing to restrict duplicative or cumulative evidence and/or arguments,[529] has combined and reworded the previously admitted contentions with the migrated contentions as follows:

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.[530]

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.[531]

[529] 10 C.F.R. § 2.319(e).

[530] Contention 1A merges previously admitted Oglala Sioux Tribe Contention 1 (OST-1) and Consolidated Intervenors Contention K (CI-K) with migrated Oglala Sioux Tribe Contention 1 regarding the DSEIS (OST DSEIS-1) and Consolidated Intervenors Contention A regarding the DSEIS (CI DSEIS-A).

[531] Contention 1B merges previously admitted OST-1 with migrated OST DSEIS-1.

Contention 2: The DSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.[532]

Contention 3: The DSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater.[533]

Contention 4: The DSEIS Fails to Adequately Analyze Ground Water Quantity Impacts.[534]

B. The Board further admits the following contentions submitted in response to the publication of the DSEIS:

Contention 6: The DSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures.

Contention 9: The DSEIS Fails to Consider Connected Actions.

C. The Board admits the following portion of the Oglala Sioux Tribe's proposed Contention 14 in this proceeding:

Contention 14A: Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations.

Contention 14B: Whether the DSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

D. The Board finds inadmissible the following contentions proposed by the Oglala Sioux Tribe in response to the publication of the DSEIS: Contentions 5, 7, 8, 10, 11, 12, 13.

E. The Board finds inadmissible the following contention proposed by the Consolidated Intervenors in response to the publication of the DSEIS: Contention D.

F. The Board will hold a telephone conference with the parties to discuss administrative matters, including the designation under 10 C.F.R. § 2.316 of the lead intervenor that will be responsible for the litigation of each of the consolidated contentions, i.e., Contentions 1A, 1B, 2, and 3, and a schedule for further proceedings in this matter, including a site visit and a Limited Appearance session pursuant to 10 C.F.R. § 2.315(a).

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[532] Contention 2 merges previously admitted OST-2 and CI-D with migrated OST DSEIS-2 and CI DSEIS-B.

[533] Contention 3 merges previously admitted OST-3 and CI-E (as merged with CI-J), with migrated CI DSEIS-C and OST DSEIS-3.

[534] Contention 4 merges previously admitted OST-4 with migrated OST DSEIS-4.

G. No specific section of the Commission's regulations, including 10 C.F.R. § 2.311, permits appeals from an order ruling on the admission of new or amended contentions. Nonetheless, interlocutory review of decisions and actions of a presiding officer may be available pursuant to section 2.341(f)(2) of the Commission's regulations.[535]

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

William J. Froehlich, Chair
ADMINISTRATIVE JUDGE

Richard F. Cole
ADMINISTRATIVE JUDGE

Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
July 22, 2013

[535] The Board notes, however, that the Commission has issued an advanced notice of proposed rulemaking on April 5, 2013, entitled "Potential Changes to Interlocutory Appeals Process for Adjudicatory Decisions." *See* 78 Fed. Reg. 20,498 (2013).

APPENDIX A

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Contention 2: The DSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.

Contention 3: The DSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater.

Contention 4: The DSEIS Fails to Adequately Analyze Ground Water Quantity Impacts.

Contention 6: The DSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures.

Contention 9: The DSEIS Fails to Consider Connected Actions.

Contention 14A: Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations.

Contention 14B: Whether the DSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

Cite as 79 NRC 377 (2014) **LBP-14-5**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Richard F. Cole
Dr. Mark O. Barnett

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium Recovery Facility) **April 28, 2014**

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

To be admissible, a new or amended contention must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

A new or amended contention related to portions of the FSEIS that differ from the DSEIS must be timely filed under section 2.309(c) and must meet the contention admissibility standards of section 2.309(f)(1) to be admitted.

RULES OF PRACTICE: CONTENTIONS (FILED AFTER INITIAL DEADLINE)

If a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing

petition, it must not only meet the contention admissibility standards of section 2.309(f)(1), but must also satisfy the timeliness requirements of section 2.309(c) or section 2.307(a).

RULES OF PRACTICE: CONTENTIONS (FILED AFTER INITIAL DEADLINE STANDARD)

If the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard contained in 10 C.F.R. § 2.307(a) applies in determining whether the motion can be considered timely. Section 2.307(a) provides that a filing deadline "may be extended or shortened either by the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer." Good cause exists when 10 C.F.R. § 2.309(c)(1)(i)-(iii) is fulfilled.

RULES OF PRACTICE: CONTENTIONS (MIGRATION TENET)

Admitted contentions challenging NRC Staff's DSEIS may function as challenges to portions of the FSEIS when the information is sufficiently similar. If the FSEIS analysis or discussion is *in pari materia* with the DSEIS analysis or discussion, a party need not file a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the FSEIS. Parties need not file additional statements with the Board concerning contentions which migrate to the FSEIS.

RULES OF PRACTICE: CONTENTIONS (PREVIOUSLY ADMITTED)

An admitted contention remains an admitted contention until it is adjudicated by the Board or eliminated prior to the hearing by the filing of a dispositive motion. To remove an admitted contention from the proceeding, a party must file, and a Board must grant, a motion for summary disposition in conformance with 10 C.F.R. § 2.1205.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION; CONTENTION OF ADEQUACY)

There are two primary types of contentions — contentions of omission and contentions of adequacy. "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues

have been discussed in the application." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 n.53 (2011). Based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF OMISSION)

A contention of omission which has been admitted may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the alleged omission.

RULES OF PRACTICE: CONTENTIONS (CONTENTION OF ADEQUACY)

In the case of an admitted contention that challenges the adequacy of an environmental document, the inclusion of additional information in a subsequent environmental document may or may not moot the contention.

MEMORANDUM AND ORDER
(Ruling on Proposed Contentions Related to the Final Supplemental Environmental Impact Statement)

I. INTRODUCTION

This proceeding challenges the application of Powertech (USA), Inc. (Powertech) to construct and operate an in-situ leach uranium recovery (ISR) facility in Custer and Fall River Counties, South Dakota.[1] On August 5, 2010, the Board in the above-captioned matter ruled on two petitions to intervene and requests for hearing,[2] and admitted the Oglala Sioux Tribe and Consolidated Intervenors[3] as intervenors. The Board also admitted seven contentions proposed by the Oglala Sioux Tribe and the Consolidated Intervenors.[4] These contentions related to cultural resources (Consolidated Intervenors' Contention K and Oglala Sioux Tribe's Contention 1), baseline groundwater conditions (Consolidated Intervenors' Con-

[1] LBP-10-16, 72 NRC 361, 375-78 (2010).

[2] *Id.* at 375.

[3] Although originally designated Consolidated Petitioners, we now refer to Susan Henderson, Dayton Hyde, and Aligning for Responsible Mining as the Consolidated Intervenors.

[4] LBP-10-16, 72 NRC at 443-44.

tention D and Oglala Sioux Tribe's Contention 2), hydrogeology (Consolidated Intervenors' Contention E/J and Oglala Sioux Tribe's Contention 3), and groundwater consumption (Oglala Sioux Tribe's Contention 4).[5] The Board rejected contentions challenging, among other issues, Powertech's discussion of its plans for disposal of 11e(2) byproduct material and the analysis of actions connected to the Dewey-Burdock Project.[6]

On November 15, 2012, the Nuclear Regulatory Commission Staff (NRC Staff) issued its Draft Supplemental Environmental Impact Statement (DSEIS) prepared pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, and the agency's implementing regulations, 10 C.F.R. Part 51.[7] On January 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors filed proposed contentions relating to the DSEIS.[8] The Board held that, under the migration tenet, a number of the proposed contentions in response to the DSEIS were *in para materia* with previously admitted contentions.[9] These contentions were combined and reworded by the Board and substituted for the original admitted contentions.[10] The Board also admitted three new contentions proposed in response to the DSEIS (Oglala Sioux Tribe's Contentions 6, 9, and 14).[11] The Board rejected Oglala Sioux Tribe's proposed Contentions 5, 7, 8, 10, 11, 12, and 13 and Consolidated Intervenors' proposed Contention D.[12]

On January 29, 2014, the NRC Staff issued the Final Supplemental Environmental Impact Statement (FSEIS).[13] On March 17, 2014, both the Oglala

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[5] *Id.*

[6] *Id.* at 432-35.

[7] Letter from Patricia Jehle, Counsel for NRC Staff, to Administrative Judges Froehlich, Cole, and Barnett (Nov. 15, 2012) (ADAMS Accession No. ML12320A623); *see also* Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Draft Report, NUREG-1910 (Supp. 4 Nov. 2012) (ADAMS Accession No. ML12312A040) [hereinafter DSEIS].

[8] *See* List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013) [hereinafter Oglala Sioux Tribe's Proposed Contentions]; Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013) [hereinafter Consolidated Intervenors' Proposed DSEIS Contentions].

[9] LBP-13-9, 78 NRC 37, 113-15 (2013).

[10] *Contention 1A* merged previously admitted Oglala Sioux Tribe Contention 1 (OST-1) and Consolidated Intervenors Contention K (CI-K) with migrated Oglala Sioux Tribe Contention 1 regarding the DSEIS (OST DSEIS-1) and Consolidated Intervenors Contention A regarding the DSEIS (CI DSEIS-A); *Contention 1B* merged previously admitted OST-1 with migrated OST DSEIS-1; *Contention 2* merged previously admitted OST-2 and CI-D with migrated OST DSEIS-2 and CI DSEIS-B; *Contention 3* merged previously admitted OST-3 and CI-E (as merged with CI-J), with migrated CI DSEIS-C and OST DSEIS-3; *Contention 4* merged previously admitted OST-4 with migrated OST DSEIS-4. *See id.* at 112-13.

[11] *Id.* at 114.

[12] *Id.*

[13] Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling

(Continued)

Sioux Tribe and the Consolidated Intervenors filed "Statements of Contentions" with proposed contentions relating to the FSEIS.[14] The Oglala Sioux Tribe filed ten contentions and the Consolidated Intervenors filed five contentions. On April 4, 2014, Powertech and the NRC Staff filed answers opposing the proposed contentions.[15] Powertech argues the Intervenors have not proffered any new or amended contentions.[16] With the exception of Contention 2 (Baseline Groundwater Conditions), the NRC Staff urges the Board to "dismiss the Intervenors' previously admitted contentions and reject the Tribe's new contentions."[17] On April 11, 2014, the Oglala Sioux Tribe and the Consolidated Intervenors filed replies to the NRC Staff and Powertech answers.[18]

Meanwhile, on April 8, 2014, the NRC Staff issued NRC Source Materials License No. SUA-1600 to Powertech.[19] The license allows Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock Project.[20]

II. LEGAL STANDARDS

A. New and Amended Contentions

To be admissible, a new or amended contention must satisfy the substantive

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Facilities, Final Report, NUREG-1910 (Supp. 4 Jan. 2014) (ADAMS Accession Nos. ML14024A477 (Chapters 1-5) and ML14024A478 (Chapters 6-11 and Appendices)) [hereinafter FSEIS].

[14] Statement of Contentions of the Oglala Sioux Tribe Following Issuance of [FSEIS] (Mar. 17, 2014) [hereinafter OST Statement]; Consolidated Intervenors' Statement of Contentions (Mar. 17, 2014) [hereinafter CI Statement].

[15] Applicant Powertech (USA) Inc's Response to Consolidated Petitioners' Request for Admission of New or Amended Contentions on NUREG-1910, Supplement 4 (April 4, 2014) [hereinafter Powertech Response]; NRC Staff's Answer to Contentions on [FSEIS] (April 4, 2014) [hereinafter NRC Staff Answer].

[16] Powertech Response at 1.

[17] NRC Staff Answer at 35.

[18] Reply of the Oglala Sioux Tribe Regarding Contentions Following Issuance of [FSEIS] (Apr. 11, 2014); Consolidated Intervenors' Consolidated Reply to Applicant and NRC Staff Answers to Contentions on [FSEIS] (Apr. 11, 2014).

[19] Materials License, NRC Form 374 (Apr. 8, 2014) (ADAMS Accession No. ML14043A392). *See also* ADAMS Accession Package Number ML14043A052, which includes the license transmittal letter, the license, and the Final Safety Evaluation Report. The NRC Staff also issued its Record of Decision for the Dewey-Burdock Uranium In-Situ Recovery (ISR) Project at ADAMS Accession No. ML14066A466. The Final Programmatic Agreement was executed April 7, 2014, and is available in ADAMS Accession Package No. ML14066A344.

[20] Intervenors have filed for a stay of this license under 10 C.F.R. § 2.1213. The Board will rule on these motions in a future order.

contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1). Namely, the contention must:

> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
> (ii) Provide a brief explanation of the basis for the contention;
> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
> (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue . . . ; [and]
> (vi) . . . [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.[21]

A failure to meet any of these criteria renders the contention inadmissible.

Additionally, pursuant to 10 C.F.R. § 2.309(c),[22] if a party submits a proposed contention after the initial filing deadline announced in the applicable *Federal Register* notice for submitting a hearing petition, it "will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause."[23] Good cause exists when:

> (i) [t]he information upon which the filing is based was not previously available;
> (ii) [t]he information upon which the filing is based is materially different from information previously available; and
> (iii) [t]he filing has been submitted in a timely fashion based on the availability of the subsequent information.[24]

If the reason a motion to admit a new or amended contention was filed after the initial deadline does not relate to the substance of the filing itself, the standard contained in 10 C.F.R. § 2.307(a) applies in determining whether the motion can be considered timely. Section 2.307(a) provides that a filing deadline "may be extended or shortened either by the Commission or the presiding officer for good cause, or by stipulation approved by the Commission or the presiding officer."

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[21] 10 C.F.R. § 2.309(f)(1).

[22] The current section 2.309(c) was promulgated on August 3, 2012. Soon after this date, the Board determined that the standards set forth in the now-current section 2.309(c) would apply to new or amended contentions. Licensing Board Order (Second Prehearing Conference Call Summary and Supplemental Initial Scheduling Order) (Oct. 16, 2012) at 4 (unpublished).

[23] 10 C.F.R. § 2.309(c).

[24] 10 C.F.R. § 2.309(c)(i)-(iii).

Good cause in this section is not explicitly defined.[25] Therefore, to be admissible at this stage, a contention must not only meet contention admissibility standards of section 2.309(f)(1), but must also satisfy the timeliness requirements of section 2.309(c) or section 2.307(a).[26]

B. Migration Tenet

As this Board explained when it admitted new contentions challenging the DSEIS, "[a]dmitted contentions challenging an applicant's Environmental Report (ER) may, in appropriate circumstances, function as challenges to similar portions of the Staff's Environmental Impact Statement."[27] This "migration tenet" also applies when the information in the FSEIS is sufficiently similar to the information in the DSEIS.[28] In this circumstance, a party need not file a new or amended contention; the previously admitted contention will simply be viewed as applying to the relevant portion of the FSEIS.[29] This is appropriate, however, only when the FSEIS analysis or discussion at issue is essentially *in para materia* with the DSEIS analysis or discussion that is the focus of the contention.[30]

Alternatively, if attempting to raise a new issue based on new information in the FSEIS, an intervenor must file a new contention. This would be necessary, for example, if the information in the FSEIS is sufficiently different from the information in the DSEIS that supported the original contention's admission.[31] A new or amended contention related to portions of the FSEIS that differ from the

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[25] 77 Fed. Reg. 46,562, 46,571 (Aug. 3, 2012) ("The NRC notes that 'good cause' in § 2.307 does not share the same definition that is used for 'good cause' in final § 2.309(c) . . . ."). The *Federal Register* notice provides as examples health issues or an unexpected weather event as reasons that might constitute good cause for purposes of requesting an extension under section 2.307.

[26] The Board issued a scheduling order on February 20, 2014, which set a deadline of March 17, 2014 for any new or amended contentions arising from the publication of the FSEIS. Memorandum (Summarizing the February 12, 2014 Teleconference) (Feb. 20, 2014) at 6 (unpublished).

[27] LBP-13-9, 78 NRC at 46 (citing *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001)); *see also Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998).

[28] *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011); *accord Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63-64 (2008).

[29] *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 470-71 (2012) ("The Board may construe an admitted contention contesting the ER as a challenge to a subsequently issued DEIS or FEIS without the necessity for Intervenors to file a new or amended contention.").

[30] LBP-13-9, 78 NRC at 47.

[31] *Vogtle ESP*, LBP-08-2, 67 NRC at 63-64.

DSEIS must be timely filed under section 2.309(c) and must meet the contention admissibility standards of section 2.309(f)(1) to be admitted.[32]

In this case, perhaps out of an abundance of caution, the Intervenors repleaded their previously admitted contentions. This was an unnecessary action by the Intervenors and led the NRC Staff and Powertech to rehash the objections raised when the contentions were first proffered. These answers, to the extent they attempt to reargue the admissibility of previously admitted contentions, are also unnecessary. An admitted contention remains an admitted contention until it is adjudicated by the Board or eliminated prior to the hearing by the filing of a dispositive motion. To remove an admitted contention from the proceeding a party must file, and a Board must grant, a motion for summary disposition in conformance with 10 C.F.R. § 2.1205.

C. Contentions of Omission or Adequacy

There are two primary types of contentions — contentions of omission and contentions of adequacy.[33] "A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application."[34] Based on its language, a contention can be characterized as a contention of omission, a contention of adequacy, or both.[35]

A contention of omission which has been admitted may be rendered moot by subsequent license-related documents filed by the NRC Staff that address the

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[32] LBP-13-9, 78 NRC at 47 (citing *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382 (2002) ("While a contention contesting an applicant's environmental report generally may be viewed as a challenge to the NRC Staff's subsequent draft EIS, *new* claims must be raised in a new or amended contention.")); *Vogtle ESP*, LBP-08-2, 67 NRC at 64 (explaining that, if the portion of the ER that an admitted contention challenges is not sufficiently similar to the DEIS, "an intervenor attempting to litigate an issue based on expressed concerns about the DEIS may need to amend the admitted contention or, if the information in the DEIS is sufficiently different from that in the ER that supported the contention's admission, submit a new contention").

[33] *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 NRC 149, 200 (2011); *see, e.g., Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 442 (2011) (discussing whether a contention should properly be characterized as a contention of omission or a contention of adequacy and the ramifications of such a designation with regard to contention admissibility).

[34] *Turkey Point*, LBP-11-6, 73 NRC at 200 n.53; *accord McGuire/Catawba*, CLI-02-28, 56 NRC at 382-83 ("There is, in short, a difference between contentions that merely allege an 'omission' of information and those that challenge substantively and specifically how particular information has been discussed in a license application.").

[35] *McGuire/Catawba*, CLI-02-28, 56 NRC at 383 n.45; *see also Turkey Point*, LBP-11-6, 73 NRC at 199-200.

alleged omission.[36] In this circumstance, the applicant or the NRC Staff may file a motion for summary disposition or a motion to dismiss. If the motion is granted, then the party that filed the original contention of omission must file a new or amended contention if it wishes to challenge the adequacy or sufficiency of the NRC Staff's treatment of the relevant issue.[37] That new or amended contention must be timely filed and must meet the contention admissibility standards. Generalized grievances with the sufficiency of the NRC Staff's analysis or the adequacy of included documentation are not enough to raise a proposed contention to the level of admissibility.[38]

In the case of an admitted contention that challenges the adequacy of an environmental document, the inclusion of additional information in a subsequent environmental document may or may not moot the contention. If a party believes the admitted contention is mooted by the inclusion of additional information, that party may file a motion for summary disposition pursuant 10 C.F.R. § 2.1205. On the other hand, if an intervenor merely cites to additional information in the subsequent environmental document and states these are additional reasons for the intervenors' belief that the environmental document is inadequate, the contention will migrate. If intervenors make reference to new material in the FSEIS but do not address the six elements of 10 C.F.R. § 2.309(f)(1), such references to new material do not give rise to either a new or amended contention.

III. DISCUSSION

A. Contention 1A

"Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources."[39]

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[36] *McGuire/Catawba*, CLI-02-28, 56 NRC at 383 ("Where a contention alleges the omission of particular information or an issue from an application, and the information is later supplied by the applicant or considered by the Staff in a draft EIS, the contention is moot.").

[37] *Id.*

[38] *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-10, 66 NRC 1, 23 (2007); *Shieldalloy Metallurgical Corp.* (Amendment Request for Decommissioning of the Newfield, New Jersey Facility), LBP-07-5, 65 NRC 341, 352 (2007) ("'[T]he contention rule is strict by design' and does 'not permit the filing of a vague, unparticularized contention, unsupported by affidavit, expert, or documentary support.'" (footnotes omitted)); *PPL Susquehanna LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 303-04 (2007).

[39] OST Statement at 5.

1. Party Positions

The Oglala Sioux Tribe claims that the protection of historical and cultural resources has been inadequately addressed in the FSEIS in the same way it was inadequately addressed in the application and DSEIS stages.[40] Consolidated Intervenors also claim the FSEIS fails to properly analyze or comply with applicable legal requirements in the same way as the DSEIS.[41] In response, the NRC Staff argues that the FSEIS contains considerable new information relevant to this contention.[42] The NRC Staff also suggests that this contention should be dismissed or rejected by the Board.[43] Powertech ignores the migration tenet. It insists that in order to remain at issue in the case, Contention 1A must identify new information in the FSEIS which did not appear in the DSEIS, and that Intervenors have failed to do so.[44]

2. Board Ruling

With the issuance of the FSEIS, the concerns regarding the protection of historical and cultural resources have migrated because this previously admitted contention challenging the DSEIS now challenges the same information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails.[45] A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.

Contention 1A, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[40] *Id.* at 6.

[41] CI Statement at 6.

[42] NRC Staff Answer at 13.

[43] *Id.* at 1, 16, 35.

[44] Powertech Response at 8.

[45] If the NRC Staff sought to dismiss the contention on the ground that the FSEIS cured the alleged defects in the DSEIS, then the NRC Staff could have filed a motion for summary disposition or a motion to dismiss. The NRC Staff did not do so. At this point, the deadline for filing motions for summary disposition has passed. In any event, if the NRC Staff asserts that the FSEIS cured the alleged defects in the DSEIS, then the NRC Staff can make this argument in its initial or rebuttal filings associated with the imminent evidentiary hearing.

B. Contention 1B

"Failure to Involve or Consult All Interested Tribes as Required by Federal Law."[46]

1. Party Positions

Both the Oglala Sioux Tribe and Consolidated Intervenors allege tribal exclusion throughout the entire application/licensing process. Based on their claim that the FSEIS has been completed without "the requisite level of Tribal participation," they maintain that the content of this contention migrates to the most current Staff review document.[47] The NRC Staff opposes migration, citing progress made in consultation since November 2012.[48] Powertech states that Intervenors' arguments fall short of what is needed to admit a contention, and that there is no new or materially different information in the FSEIS.[49]

2. Board Ruling

With the issuance of the FSEIS, the concerns regarding a failure to involve or consult with Tribes have migrated because this previously admitted contention now appears in relation to information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.

As previously admitted, Contention 1B remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

C. Contention 2

"Failure to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality."[50]

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[46] OST Statement at 9.
[47] *Id.* at 13; CI Statement at 19.
[48] NRC Staff Answer at 16.
[49] Powertech Response at 11.
[50] OST Statement at 14.

1. Party Positions

The intervenors argue that baseline conditions are mandated by statute and regulation, and that the FSEIS is inadequate because, in common with the ER and the DSEIS, it fails to include a proper analysis of the required baselines with respect to groundwater quality.[51] The NRC Staff does not oppose migration of this contention.[52] Powertech, however, cites examples where text was added in the FSEIS in order to oppose migration of the contention.[53] Neither the NRC Staff nor Powertech moved for summary disposition of the environmental portions of this admitted contention.[54]

2. Board Ruling

The migration tenet applies and this issue migrates from a criticism of baseline groundwater determinations in the Powertech ER to a criticism of baseline groundwater determinations in the NRC Staff's FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The addition of new text to an FSEIS does not necessarily prevent a contention from migrating, especially when it is a contention of adequacy.[55] As long as the underlying issue or concern involved in the admitted contention remains (whether or not there are additional passages on the subject in the FSEIS), the contention migrates. Despite the addition of new materials in the FSEIS, Intervenors' concern over the adequacy of these materials has not been resolved.

Except for changing DSEIS to FSEIS, Contention 2, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

D. Contention 3

"Failure to Include an Adequate Hydrogeological Analysis to Assess Potential Impacts to Groundwater."[56]

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[51] *Id.*; CI Statement at 20; Oglala Sioux Tribe's Proposed Contentions at 10-11.

[52] NRC Staff Answer at 18.

[53] Powertech Response at 12.

[54] The NRC Staff filed a timely motion for summary disposition of the *safety* portions of Contention 2 on April 11, 2014. *See* NRC Staff's Motion for Summary Disposition of Safety Contentions 2 and 3 (Apr. 11, 2014). Answers to that motion were due on or before April 25, 2014. The Board will decide all motions for summary disposition in a separate order.

[55] LBP-13-9, 78 NRC at 54 (previously indicating that this contention is a contention of adequacy).

[56] OST Statement at 16.

1. Party Positions

Intervenors claim that "the FSEIS fails to provide sufficient information regarding the hydrologic and geological setting of the area."[57] The NRC Staff asserts that the inclusion of a new Powertech report in the FSEIS comprises significant new information that should not allow the contention to migrate to the FSEIS.[58] Powertech asserts that its application contains sufficient data, and that in its opinion, Contention 3 "should be excluded."[59] Neither the NRC Staff nor Powertech has moved for summary disposition of the environmental portions of this admitted contention.[60]

2. Board Ruling

The Consolidated Intervenors and the Oglala Sioux Tribe present the same concern that was raised regarding Powertech's ER (and that was admitted as a contention) here, as a concern regarding the FSEIS. Thus, it is not necessary to propose a new or amended contention because, as the Board has explained, if the "new" contention raises the same concern admitted at the initial stage of the proceeding, its admissibility need not be relitigated and redecided at each step of the NEPA process, namely the issuances of the DSEIS and the FSEIS.[61] This contention is not new; it is merely the continuation of a previously admitted contention. To the extent the Intervenors have concerns with the adequacy of the hydrogeologic analysis necessary to show adequate confinement and potential impacts to groundwater, this is already an issue set for hearing. Contention 3 is a contention of adequacy, as the Board previously indicated,[62] and despite the inclusion of new data in the FSEIS, Intervenors' concern over the adequacy of the environmental review has not been resolved.

Except for changing DSEIS to FSEIS, Contention 3, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[57] *Id.*; CI Statement at 22.

[58] NRC Staff Answer at 19.

[59] Powertech Response at 15-16.

[60] The NRC Staff filed a timely motion for summary disposition of the *safety* portions of Contention 3 on April 11, 2014. *See* NRC Staff's Motion for Summary Disposition of Safety Contentions 2 and 3 (Apr. 11, 2014). Answers to that motion were due on or before April 25, 2014. The Board will decide all motions for summary disposition in a separate order.

[61] LBP-13-9, 78 NRC at 46-47.

[62] *Id.* at 58.

E. Contention 4

"Failure to Adequately Analyze Ground Water Quantity Impacts."[63]

1. Party Positions

The Intervenors contend that the FSEIS fails to provide adequate analysis of groundwater impacts of the project.[64] The NRC Staff opposes migration on the ground that the FSEIS contains substantial new relevant information which did not appear in previous ER documents.[65] Powertech posits that Contention 4 must be viewed as a new contention, and "rejected as showing no new or materially different information."[66]

2. Board Ruling

The Intervenors present the same concern that was raised by the Oglala Sioux Tribe in the initial pleading stage (and that was admitted as a contention) as a concern regarding the FSEIS. It is, therefore, unnecessary to raise a new or amended contention. To the extent the "new" contention raises the same concern admitted at the initial stage of the proceeding, it need not be repeated to remain a viable contention. Accordingly, the Oglala Sioux Tribe's concern with the adequacy of the analysis of groundwater quantity impacts is already an issue set for hearing. The addition of new text to an FSEIS does not necessarily prevent a contention from migrating, especially when it is a contention of adequacy.[67] Despite the addition of new materials in the FSEIS, Intervenors' concern over the adequacy of these materials has not been resolved. The NRC Staff's attempt to dismiss this contention fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.[68]

Except for changing DSEIS to FSEIS, Contention 4, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

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[63] OST Statement at 19.
[64] *Id.* at 19; CI Statement at 25.
[65] NRC Staff Answer at 21.
[66] Powertech Response at 17.
[67] LBP-13-9, 78 NRC at 54 (previously indicating that this contention is a contention of adequacy).
[68] *Supra* note 45.

F. Contention 6

"Failure to Adequately Describe or Analyze Proposed Mitigation Measures."[69]

1. Party Positions

In Contention 6, the Oglala Sioux Tribe claims that the FSEIS violates 10 C.F.R. §§ 51.10, 51.70, and 51.71, and NEPA and implementing regulations and "fail[s] to include the required discussion of mitigation measures."[70] The Oglala Sioux Tribe also insists that NEPA requires the FSEIS to include and discuss means to mitigate adverse environmental impacts, but that the FSEIS does not evaluate the effectiveness of any of the mitigation measures it proposes.[71] Similar to its complaints about the DSEIS, the Oglala Sioux Tribe contends that the FSEIS "mitigation measure discussion consists of a multi-page chart which simply lists a series of proposed mitigation measure [sic], with no elaboration or other analysis of how the operator expects to accomplish these items, or the expected effectiveness/limitations of each measure, as required by NEPA."[72]

The NRC Staff opposes migration of this contention because the Staff claims the FSEIS identifies new mitigation measures and has additional discussions on previously identified mitigation measures.[73] Powertech also contends that significant new information in the FSEIS should result in the Board rejecting Contention 6.[74]

2. Board Ruling

Concerns regarding a failure to adequately describe or analyze proposed mitigation measures have migrated because this previously admitted contention now appears in relation to information in the FSEIS. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. The NRC Staff's attempt to dismiss this contention also fails. A motion for summary disposition must be filed, with support, in order to dismiss a previously admitted contention.[75]

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[69] OST Statement at 21.
[70] *Id.*
[71] *Id.* at 21-22.
[72] *Id.* at 25.
[73] NRC Staff Answer at 23.
[74] Powertech Response at 18-19.
[75] *Supra* note 45.

Except for changing DSEIS to FSEIS, Contention 6, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

G. Contention 9

"Failure to Consider Connected Actions."[76]

1. Party Positions

The Oglala Sioux Tribe contends that the same issues surrounding the NRC's failure to consider connected actions in the DSEIS continue in the FSEIS, and that no significant new information is provided.[77] The Oglala Sioux Tribe contends that "[l]ike the DSEIS, the FSEIS repeatedly relies upon EPA analyses to require appropriate mitigation measures to lessen impacts, and uses those permitting processes to simply defer analysis of impacts to EPA."[78] The NRC Staff claims that the migration tenet does not apply because updates have been made to the FSEIS analysis and because the "FSEIS's discussion of environmental impacts is not "essentially the same" as that in the DSEIS."[79] Powertech states that "contention 9 should not be admitted due the [sic] fact that NRC Staff has thoroughly addressed the use of Class III and V wells at the proposed Dewey-Burdock ISR site."[80] Powertech also contends that the "[T]ribe also does not attempt to show how the FSEIS differs from the impact analyses offered by Powertech in previously submitted documents or by NRC Staff in the DSEIS."[81]

2. Board Ruling

The Oglala Sioux Tribe asserts that NEPA requires the agency to include an analysis of actions "connected" to the project under review as well as an evaluation of the "cumulative impact" of permits and other authorizations from other federal and state agencies.[82] The NRC Staff maintains that the FSEIS's discussion of environmental impacts is not "essentially the same" as that in the DSEIS. The Staff asserts it has "updated its analysis in Chapter 4 of the SEIS, the

[76] OST Statement at 26.
[77] *Id.*
[78] *Id.* at 27.
[79] NRC Staff Answer at 25.
[80] Powertech Response at 19.
[81] *Id.* at 19-20.
[82] OST Statement at 26-27.

chapter where the Staff specifically discusses the impacts of the Dewey-Burdock Project.[83] Nonetheless, this contention now migrates because the concern or issue raised and admitted has not changed from the DSEIS to the FSEIS.

The factual question remains as to whether or not the FSEIS adequately addresses the impacts of other licensing actions. Intervenors did not need to file "statements" on this previously admitted contention. If Intervenors' "statements" were filed in an attempt to expand the scope of this contention, such an effort fails. If the Staff believed its updates to Chapter 4 fully address and resolve the question as to the adequacy of the analysis of connected actions, it should have filed a motion for summary disposition, with support, in order to dismiss a previously admitted contention.[84] Otherwise, the contention remains in the case and proceeds on to the hearing.[85] Powertech's request for the Board to reject Contention 9 similarly fails given that Contention 9 has already been admitted and is now migrating to encompass the FSEIS.

Except for changing DSEIS to FSEIS, Contention 9, as previously admitted, remains unchanged and will be adjudicated in the evidentiary hearing. For convenience, it is reproduced in Appendix A to this Order.

H. Contention 14 and FSEIS Contention 1

"Whether an Appropriate Consultation Was Conducted Pursuant to the Endangered Species Act and Implementing Regulations."[86]

"Whether the DSEIS's Impact Analyses Relevant to the Greater Sage Grouse, the Whooping Crane and the Black-Footed Ferret Are Sufficient."[87]

"Failure to Adequately Review Impacts on Wildlife and Fails to Comply with Migratory Bird Treaty Act and Bald and Golden Eagle" (sic).[88]

1. Party Positions

The Oglala Sioux Tribe alleges that "the FSEIS violates 10 C.F.R. §§ 51.10, 51.70, 51.71, the National Environmental Policy Act and implementing regulation failing to conduct the required "hard look" analysis of impacts of the proposed mine on species of birds and bats receiving special protection by the Bald and

[83] NRC Staff Answer at 25.

[84] *Supra* note 45.

[85] While the Board rejected a contention concerning the consideration of Cumulative Impacts, a contention concerning the consideration of Connected Actions was admitted. LBP-13-9, 78 NRC at 78-79, 85-86.

[86] *Id.* at 101.

[87] *Id.*

[88] OST Statement at 29.

Golden Eagle Protection Act (Eagle Protection Act) (16 U.S.C. § 668-668c) and Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703-711."[89] The Oglala Sioux Tribe further alleges that NRC Staff correspondence presented for the first time in the FSEIS regarding Endangered Species Act (ESA) consultation duties confirms that MBTA and Eagle Protection Act consultation with U.S. Fish and Wildlife Service (U.S. FWS) has not taken place, even though U.S. FWS alerted NRC Staff to these consultation requirements during correspondence regarding ESA requirements.[90] The Oglala Sioux Tribe argues the "NRC Staff completed the NEPA process without the procedural and substantive protections afforded these species by NEPA, MBTA, and the Eagle Protection Act."[91]

Regarding Contention 14A, the NRC Staff maintains that the FSEIS contains information showing U.S. FWS concurrence with the Staff's finding and that as a result, Contention 14A should not migrate.[92] For Contention 14B the NRC Staff asserts that additional information provided in the FSEIS on the greater sage grouse, whooping crane, and the black-footed ferret prevents migration of this contention.[93] The NRC Staff also opposes admission of new FSEIS Contention 1 for lack of supporting information.[94]

Powertech states that all of the issues in Contention 14 and FSEIS Contention 1 are dealt with in its mitigation plan, and that the Oglala Sioux Tribe draws inaccurate and improper conclusions on the effect of the various species protection acts.[95]

2. Board Ruling

Previously admitted Contentions 14A and 14B migrate to the FSEIS. In LBP-13-9 the Board found portions of Contention 14 were admissible as to the completion of the section 7 consultation process and the adequacy of the NRC Staff's impact analyses relevant to three named species.[96] The Board admitted as Contention 14A — Whether an appropriate consultation was conducted pursuant to the ESA and implementing regulations; and admitted as Contention 14B — Whether the DSEIS's impact analyses relevant to the Greater Sage Grouse, the Whooping Crane, and the Black-Footed Ferret are sufficient. The Board noted specifically that Powertech and the NRC Staff may respond to this contention

[89] *Id.* at 29-30.
[90] *Id.* at 33 citing FSEIS at A-157.
[91] *Id.* at 33.
[92] NRC Staff Answer at 28.
[93] *Id.* at 29.
[94] *Id.* at 30-31.
[95] Powertech Response at 20-21.
[96] LBP-13-9, 78 NRC at 98-101.

with an appropriate motion for summary disposition if documentation or other information exists that would moot the reformulated Contention 14.[97] The Board also previously noted that each contention is a contention of adequacy.[98] As a result, as long as Intervenors' concerns over the adequacy of the FSEIS remain, whether or not it contains new information, the contention may migrate.

The NRC Staff's argument that Contention 14A does not migrate to the FSEIS and its observation that the Tribe provides no new basis for keeping this contention in the hearing is rejected.[99] The NRC Staff has it backwards — there is no necessity to file anything to keep an admitted contention in the proceeding. There is only an opportunity to move for summary disposition if new evidence is presented which moots an admitted contention.[100] Neither the NRC Staff nor Powertech has filed a motion for summary disposition as to Contention 14A or Contention 14B. Contention 14A and Contention 14B migrate because the underlying issue and concern raised in response to the DSEIS remains, and because a motion for summary disposition has not been filed.

Except for changing DSEIS to FSEIS, Contention 14A and Contention 14B, as previously admitted, remain unchanged and will be adjudicated in the evidentiary hearing. For convenience, they appear in Appendix A to this Order.

To the extent FSEIS Contention 1 was submitted by the Oglala Sioux Tribe to expand Contention 14 or to the extent it proposes a new or amended contention, the attempt fails. The Oglala Sioux Tribe has filed nothing materially different from what has already been admitted as to Contentions 14A and 14B, nor has it supported its proposed FSEIS Contention 1 with alleged facts or expert opinion, required by section 2.309(f)(1)(iii). Insofar as the Oglala Sioux Tribe is making additional claims related to the MBTA, the Board finds it has not provided a sufficient explanation of its concern nor has it provided a concise statement of the alleged facts supporting its position, as required by 10 C.F.R. § 2.309(f)(1)(ii) and (v). This Board has previously rejected these arguments as a basis for a contention concerning the MBTA and the BGEPA.[101]

Although the Oglala Sioux Tribe again claims that the MBTA and BGEPA require the NRC to consult with U.S. FWS, the Oglala Sioux Tribe cites only to the

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[97] *Id.* at 101 n.449.

[98] *Id.* at 98, 101.

[99] NRC Staff Answer at 28.

[100] A motion for summary disposition must contend that there are facts on which "there is no genuine issue to be heard." 10 C.F.R. § 2.710(a). Such facts must necessarily have come to light since LBP-13-9, 78 NRC 37 was issued and the Board found that all admitted contentions contained a 10 C.F.R. § 2.309(f)(1)(iv) "genuine dispute" on a material fact. *See generally Nuclear Innovation North America LLC* (South Texas Project, Units 3 and 4), LBP-12-5, 75 NRC 227, 248 (2012) ("Applicant had an opportunity to move for summary disposition of the contention based on the FEIS's new analyses mooting the contention. It did not do so.").

[101] LBP-13-9, 78 NRC at 101.

statutes themselves, which contain no such requirement. Section 2.309(f)(1)(vi) requires a petitioner to provide a citation to the section of law or regulation which sets forth the requirement alleged to be violated. The Oglala Sioux Tribe's contention does not do so, and thus, lacks a legal basis.

I. FSEIS Contention 2

"Inadequate Analysis of Direct, Indirect, and Cumulative Impacts of Disposal of Solid 11e2 Byproduct Material or the Reasonable Alternatives to Transportation and Disposal at the White Mesa Facility."[102]

1. Party Positions

The Oglala Sioux Tribe proposes a new contention based on what it claims is new information in the FSEIS that the waste disposal site for the project has been selected without a review of alternatives.[103] The NRC Staff argues that the Oglala Sioux Tribe has not supplied material new information since the DSEIS listed the White Mesa site as a possible site, and the proposed contention does not meet the requirements for a new contention.[104] Powertech states that no new information exists to support a new contention, as the waste disposal site chosen in the FSEIS was also selected in the DSEIS.[105]

2. Board Ruling

In FSEIS Contention 2 the Oglala Sioux Tribe argues that the FSEIS violates NEPA because it does not include a reviewable plan for disposal of byproduct material resulting from ISR operations. This contention has twice been rejected by this Board, once as a challenge to the Powertech ER,[106] and once as a challenge to the DSEIS.[107]

As the NRC Staff correctly notes, given that the Board rejected the contention originally, the migration tenet does not apply and the Oglala Sioux Tribe must meet the requirements applicable to new contentions.[108] Among these requirements, the

[102] OST Statement at 33.
[103] *Id.* at 33-34.
[104] NRC Staff Answer at 32-33.
[105] Powertech Response at 22.
[106] LBP-10-16, 72 NRC at 432-35.
[107] LBP-13-9, 78 NRC at 69-72.
[108] NRC Staff Answer at 32.

contention must be based on information materially different than the information previously available.[109]

A petitioner must demonstrate that the proposed contention is based on new or materially or significantly different information. Here, the Oglala Sioux Tribe does not identify any information that differs materially from the information available when the DSEIS was issued. The possible use of the White Mesa site in Utah for disposal of solid byproduct material appears in the DSEIS.[110] The change in White Mesa's designation from a possible disposal site to the site Powertech assumes it will use is not materially different information.[111] The Oglala Sioux Tribe does not even attempt to make this showing, as its argument does not identify where the FSEIS differs in any way from either Powertech's initial license application or subsequently filed documents identified by NRC Staff in monthly hearing file updates. Thus, the Oglala Sioux Tribe's arguments do not support admitting the proposed contention, and do not comply with 10 C.F.R. § 2.309(c)(2)(ii).

Further, the Oglala Sioux Tribe fails to challenge relevant sections of the environmental analysis. Although the Oglala Sioux Tribe makes general reference to the Generic Environmental Impact Statement (GEIS),[112] it does not challenge specific sections addressing waste disposal.[113] The Oglala Sioux Tribe also fails to challenge comment responses where the NRC Staff provides information relevant to this contention.[114]

Finally, the Board notes that Powertech's March 19, 2014 Draft License, License Conditions 9.9 and 12.6, requires Powertech to have an 11e(2) byproduct material disposal contract in place prior to the commencement of operations. This Board has already found that 10 C.F.R. § 40.31(h) applies to uranium mills, and not to ISR facilities.[115] Thus, the Oglala Sioux Tribe's allegation that 10 C.F.R. § 40.31(h) and 10 C.F.R. Part 40, Appendix A, Criterion 1 require further analysis of this issue will, again, not be admitted. Because the Tribe fails to meet the requirements for a new contention, the Board must reject FSEIS Contention 2.

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[109] 10 C.F.R. § 2.309(c)(1)(ii).
[110] DSEIS at 4-196–4-212.
[111] *Compare* DSEIS at p. 3-105 *with* FSEIS at p. 3-116.
[112] OST Statement at 38.
[113] GEIS §§ 4.2.12, 4.3.12, 4.4.12.
[114] FSEIS, Appendix E, § E5.29.2.
[115] LBP-10-16, 72 NRC 434.

J. FSEIS Contention 3

"Failure to Provide NEPA Comment Opportunity for Impacts Associated with Air Emissions."[116]

1. Party Positions

The Oglala Sioux Tribe contends that significant new information on impacts from air emissions was provided in the FSEIS, but no opportunity was provided for the Tribe or the public to comment on the data and analysis.[117] The Oglala Sioux Tribe alleges this is a contention of omission and inadequate NEPA analysis.[118] The NRC Staff responds that the FSEIS only needs to be circulated for comment if the air emission impacts data were significantly different from impacts already studied, and that the Oglala Sioux Tribe did not make a claim that the new data met this standard.[119] Powertech claims that an ambient air quality emission protocol was created in July 2013, and that the Oglala Sioux Tribe did not comment at this stage of the process.[120] Powertech also claims that the air quality effects have shown smaller potential impacts than the conclusions reached in the DSEIS.[121]

2. Board Ruling

The new air emissions data do not point to any impacts materially different from those identified in the DSEIS. In the DSEIS the NRC Staff anticipated that Powertech would update its air emissions data.[122] The NRC Staff used a bounding analysis in the DSEIS to assess impacts from air emissions.[123] The emissions data presented in the FSEIS fall within the NRC Staff's bounding analysis.[124] As the Staff explains in its comment response on page E-165 of the FSEIS:

The updated information considered when developing the final SEIS does not significantly change the Staff's analysis of air impacts as presented in the draft SEIS. To the contrary, as described in final SEIS Table C-19, the draft analysis bounds the final NRC analysis. Peak year, construction phase, and cumulative

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[116] OST Statement at 39.
[117] *Id.*
[118] *Id.*
[119] NRC Staff Answer at 34.
[120] Powertech Response at 23-24.
[121] *Id.* at 24.
[122] NRC Staff Answer at 34 n.57.
[123] FSEIS at C-26 ("The draft SEIS presented a conservative or bounding analysis relative to the final SEIS.").
[124] FSEIS at C-26, Table C-18.

impact magnitudes in the draft and final SEISs were the same (i.e., SMALL to MODERATE). For the operations, aquifer restoration, and decommissioning phases, the draft SEIS impact magnitude of SMALL to MODERATE was reduced to SMALL in the final SEIS.

In other words, rather than presenting a "seriously different picture of the environmental impact of the proposed project,"[125] the updated air emissions data confirmed the Staff's assessment of the Dewey-Burdock Project's impact.[126]

In sum, the Oglala Sioux Tribe fails to show the FSEIS's air emissions data represent new or materially different information required for admitting a new contention. The Oglala Sioux Tribe has not met the standard required by 10 C.F.R. § 2.309(f)(1)(iv), (v), or (vi).

K. Consolidated Intervenors' Contentions

1. Position of the Consolidated Intervenors

The Consolidated Intervenors' Statement of Contentions addresses previously admitted Contentions 1A, 1B, 2, 3, and 4.[127] Consolidated Intervenors note that "none of the issues identified in the DSEIS Contentions have been addressed in the FSEIS . . . ."[128] Consolidated Intervenors further "contend that the FSEIS discussion of each of the already-admitted contentions is *in para materia* with the analysis from the DSEIS."[129] In an abundance of caution the Consolidated Intervenors incorporate by reference the detailed discussion of contentions in the [Oglala Sioux] Tribe's Statement of Contentions dated March 17, 2014.[130]

2. Board Ruling

The Board has already addressed the substance of each of the Consolidated Intervenors' statements of contentions, *supra*. Nothing in the statements of contentions filed by either the Oglala Sioux Tribe or the Consolidated Intervenors expands the previously admitted contentions. Each of the contentions admitted by LBP-13-9 migrates as an issue in the upcoming August 2014 adjudication. The only modification to the previously admitted contentions is that the contentions are now criticisms of the FSEIS instead of the DSEIS.

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[125] *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuqerque, NM 87120), CLI-99-22, 50 NRC 3, 14 (1999).

[126] FSEIS at C-26, Table C-18.

[127] CI Statement at 6, 14, 20, 22, 25.

[128] *Id.* at 2.

[129] *Id.* at 5.

[130] *Id.*

The scope of that adjudication may, however, be narrowed by the grant of a motion for summary disposition. Such motions for summary disposition were filed on April 11, 2014[131] and will be addressed by the Board in a separate order.

Table of Admitted Contentions
Dewey-Burdock In-Situ Recovery Facility

Topic[132]	Oglala Sioux Original — 2010	Oglala Sioux DSEIS — 2013	Consolidated Intervenors Original — 2010	Consolidated Intervenors DSEIS — 2013	Admitted for Adjudication
Historical & cultural resources	1	1	K	A	1A
Failure to consult	1	1	—	—	1B
Groundwater quality	2	2	D	B	2
Hydrogeological information	3	3	E and J	C	3
Groundwater quantity impacts	4	4	F*	D*	4
Mitigation measures	—	6	—	—	6
Connected actions	—	9	—	—	9
Consultation on Endangered Species Act	—	14	—	—	14A
Sufficiency of impact analyses	—	14	—	—	14B

*Contentions rejected by the Board

[131] NRC Staff's Motion for Summary Disposition on Safety Contentions 2 and 3 (Apr. 11, 2014); Oglala Sioux Tribe's Motion for Summary Disposition National Environmental Policy Act Contentions 1A and 6 — Mitigation Measures (Apr. 11, 2014).

[132] The statement of the admitted contention going forward is contained in the Board's Order, *infra*, and in Appendix A to this Order.

IV. BOARD ORDER

A. The Board finds the following previously admitted contentions *migrate* and now refer to the FSEIS instead of the DSEIS:

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.

Contention 3: The FSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater.

Contention 4: The FSEIS Fails to Adequately Analyze Ground Water Quantity Impacts.

Contention 6: The FSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures.

Contention 9: The FSEIS Fails to Consider Connected Actions.

Contention 14A: Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations.

Contention 14B: Whether the FSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

B. The NRC Staff's conclusion that "the Board should dismiss the Intervenors' previously admitted contentions"[133] is *denied.*

C. The Board finds *inadmissible* the Oglala Sioux Tribe's Contentions FSEIS 1, FSEIS 2, FSEIS 3 for failure to meet 10 C.F.R. § 2.309(f)(1) and/or § 2.309(c).

D. No specific section of the Commission's regulations, including 10 C.F.R. § 2.311, permits appeals from an order ruling on the admission of new or amended contentions. Nonetheless, interlocutory review of decisions and actions of a presiding officer may be available pursuant to section 2.341(f)(2) of the Commission's regulations.

[133] NRC Staff Answer at 35.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Richard F. Cole
ADMINISTRATIVE JUDGE

Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 28, 2014

APPENDIX A

Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources.

Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law.

Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Ground Water Quality.

Contention 3: The FSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater.

Contention 4: The FSEIS Fails to Adequately Analyze Ground Water Quantity Impacts.

Contention 6: The FSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures.

Contention 9: The FSEIS Fails to Consider Connected Actions.

Contention 14A: Whether an appropriate consultation was conducted pursuant to the Endangered Species Act and implementing regulations.

Contention 14B: Whether the FSEIS's impact analyses relevant to the greater sage grouse, the whooping crane, and the black-footed ferret are sufficient.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Richard F. Cole
Dr. Mark O. Barnett

In the Matter of	Docket No. 40-9075-MLA
POWERTECH USA, INC.	ASLBP No. 10-898-02-MLA-BD01
(Dewey-Burdock In Situ Uranium Recovery Facility)	May 20, 2014

ORDER
(Removing Temporary Stay and
Denying Motions for Stay of Materials License Number SUA-1600)

I. INTRODUCTION

On April 8, 2014 the NRC Staff issued NRC Source Materials License No. SUA-1600[1] to Powertech (USA), Inc. (Powertech) pursuant to 10 C.F.R. § 2.1202(a).[2] The license allows Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock Project.[3] On April 14, 2014 the Oglala Sioux Tribe and the Consolidated Intervenors

[1] Materials License, NRC Form 374 (Apr. 8, 2014) (ADAMS Accession No. ML14043A392). See also, ADAMS Accession Package Number ML14043A052, which includes the license transmittal letter, the license, and the Final Safety Evaluation Report. The NRC Staff also issued its Record of Decision for the Dewey-Burdock Uranium In-Situ Recovery (ISR) Project at ADAMS Accession No. ML14066A466. The Final Programmatic Agreement was executed April 7, 2014 and is available in ADAMS Accession Package No. ML14066A344.

[2] Under 10 C.F.R. § 2.1202(a) the NRC Staff may issue a license "during the pendency of any hearing under this subpart."

[3] Materials License, NRC Form 374 (Apr. 8, 2014) (ADAMS Accession No. ML14043A392) at 1.

filed timely applications for a stay of the effectiveness of the NRC staff's licensing action on a matter involved in this hearing.[4] On April 24, 2014 the NRC Staff and Powertech filed oppositions to Intervenors' motions.[5] The Oglala Sioux Tribe filed an answer in support of the Consolidated Intervenors' motion on April 24, 2014.[6]

On April 30, 2014 the Board granted a temporary stay of Powertech's NRC license, pending an oral argument among the parties.[7] The temporary stay was issued to prevent any immediate and irreparable harm to any cultural or historic resources caused by earthwork or ground disturbance within the Dewey-Burdock sites and to preserve the status quo until the Board was able to hold an oral argument on the motions for a stay. The oral argument was held by telephone on Tuesday, May 13, 2014.[8]

II. LEGAL STANDARDS

The purpose in granting a stay is to preserve the status quo until a decision can be made on the merits of the underlying controversy. The grant of a stay is an extraordinary

[4] Oglala Sioux Tribe's Motion for Stay of Effectiveness of License (Apr. 14, 2014) [hereinafter OST Stay Motion]; Consolidated Intervenors' Application for a Stay of the Issuance of License No. SUA-1600 Under 10 CFR Section 2.1213 (Apr. 14, 2014) [hereinafter CI Stay Motion].

[5] NRC Staff's Opposition to Applications for a Stay (Apr. 24, 2014) [hereinafter Staff Opposition]; Powertech (USA) Inc's Response to Consolidated Intervenors and the Oglala Sioux Tribe Motions for Stay of the Effectiveness of NRC License No. SUA-1600 (Apr. 24, 2014) [hereinafter Powertech Response].

[6] Oglala Sioux Tribe's Answer in Support of Consolidated Intervenors' Motion for Stay of Effectiveness of License (Apr. 24, 2014).

[7] Order (Temporarily Granting Stay of Materials License Number SUA-1600) (Apr. 30, 2014) (unpublished).

[8] Tr. at 578–637.

remedy, and a rare occurrence in NRC practice.[9] In determining whether to grant or deny an application for a stay, a Board must balance:

> (1) Whether the requestor will be irreparably injured unless a stay is granted; (2) Whether the requestor has made a strong showing that it is likely to prevail on the merits; (3) Whether the granting of a stay would harm other participants; and (4) Where the public interest lies.[10]

Discussing these four factors in the context of 10 C.F.R. § 2.342(e), the Commission has stated that "of these factors, irreparable injury is the most important."[11] And for a potential injury to be irreparable, it must be shown to be "imminent . . . certain and great."[12] If a strong showing of irreparable injury can be shown, "a movant need not always establish a high probability of success on the merits."[13] But if a party moving for a stay fails to show irreparable injury, a Board may still grant a stay if the movant has made "an overwhelming showing" or a demonstration of "virtual certainty" that it will prevail on the merits.[14] If the movant cannot show either irreparable injury or that it is likely to prevail on the merits, a Board "need not consider the

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[9] U.S. Dep't of Energy (High-Level Waste Repository), CLI-05-27, 62 NRC 715, 718 (2005) (treating a stay as "an extraordinary equitable remedy" (quoting Pub. Serv. Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-77-27, 6 NRC 715, 716 (1977))).

[10] 10 C.F.R. § 2.1213(d).

[11] S. Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4), CLI-12-11, 75 NRC 523, 529 (2012) (citing Shieldalloy Metallurgical Corp. (Decommissioning of the Newfield, New Jersey Site), CLI-10-8, 71 NRC 142, 151 (2010) and David Geisen, CLI-09-23, 70 NRC 935, 936 & n.4 (2009)).

[12] Vogtle, CLI-12-11, 75 NRC at 529 (quoting Entergy Nuclear Vermont Yankee, LLC (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 237 (2006)).

[13] Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-820, 22 NRC 743, 746 n.8 (1985) (quoting Cuomo v. NRC, 772 F.2d 972, 974 (D.C. Cir. 1985).

[14] Vogtle, CLI-12-11, 75 NRC at 529 (quoting AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-08-13, 67 NRC 396, 400 (2008) and Shieldalloy Metallurgical Corp. (Decommissioning of the Newfield, New Jersey Site), CLI-10-8, 71 NRC 142, 154 (2010)).

remaining factors."[15] In addressing the stay criteria in a Subpart L proceeding, "a litigant must come forth with more than general or conclusory assertions in order to demonstrate its entitlement" to relief.[16] On a motion for a stay, the burden of persuasion on the four factors of listed in 10 C.F.R. § 2.1213, supra, is on the movant.[17]

III. DISCUSSION

A. Irreparable Injury

To qualify as an irreparable injury, the potential harm cited by the moving party first "must be related" to the underlying claim that is the focus of the adjudication.[18] Here, the Oglala Sioux Tribe and Consolidated Intervenors both base their motions for a stay on potential destruction of the Tribe's cultural resources and alleged continuing violations of NEPA and NHPA compliance.[19] These issues are the contentions at issue in the upcoming evidentiary hearing. Contention 1A concerns the protection of historical and cultural resources, and Contentions 1B, 2, 3, 4, 6, 9, and 14B concern alleged failures in the FSEIS and NHPA processes.[20]

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[15] Vogtle, CLI-12-11, 75 NRC at 529. This Order will discuss irreparable injury and the likelihood to prevail on the merits, but will not consider the remaining factors.

[16] Babcock and Wilcox (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-92-31, 36 NRC 255, 263 (1992) (citing United States Dep't of Energy (Clinch River Breeder Reactor Plant), ALAB-721, 17 NRC 539, 544 (1983)).

[17] Public Serv. Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 & 2), ALAB-493, 8 NRC 253, 270 (1978); Alabama Power Co. (Joseph M. Farley Nuclear Plant Units 1 and 2), CLI-81-27, 14 NRC 795, 797 (1981).

[18] Vogtle, CLI-12-11, 75 NRC at 530–31 (quoting United States v. Green Acres Enters., Inc., 86 F.3d 130, 133 (8th Cir. 1996).

[19] OST Stay Motion at 2–4; CI Stay Motion at 6–7.

[20] LBP-14-5, 79 NRC at __ (slip op. at Appendix A) (Apr. 28, 2014).

A party seeking a stay must also specifically and "reasonably demonstrate [an injury], not merely allege" generalized harm.[21] The Oglala Sioux Tribe and Consolidated Intervenors both attach declarations purporting to demonstrate the specific irreparable injury that may be suffered.[22] These declarations allege that a comprehensive cultural resource study has not been adequately conducted, and that the FSEIS is "not sufficient to identify cultural and historic resources significant to the Oglala Sioux Tribe."[23] The Tribe alleges that "construction activities slated for the site" before the evidentiary hearing will cause irreparable harm by not ensuring adequate mitigation techniques are used.[24] Consolidated Intervenors claim cultural resources are at risk if construction, including "earthwork, massive ground disturbance, roadmaking, and other preparations" begins at the site.[25]

The NRC Staff counters that the Programmatic Agreement, with which the Intervenors find fault, is sufficient to protect cultural resources, and that the Intervenors' motions lack specificity.[26] Powertech argues that Consolidated Intervenors' and the Oglala Sioux Tribe's claims are nothing more than conclusory statements, and unsupported conjecture that historic and cultural resources will be damaged or destroyed within the scope of the NRC licensed activities.[27]

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[21] Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-814, 22 NRC 191, 196 (1985).

[22] See OST Stay Motion, Decl. of Michael CatchesEnemy and Decl. of Wilmer Mesteth; CI Stay Motion, Exs. 1–11 and A1–A2.

[23] OST Stay Motion, Decl. of Michael CatchesEnemy ¶ 9.

[24] OST Stay Motion at 3–4.

[25] CI Stay Motion at 6.

[26] Staff Opposition at 3.

[27] Powertech Response at 8–10; 12–14.

Harm to tribal cultural resources does constitute irreparable injury.[28] In a District Court case granting a preliminary injunction enjoining a solar energy project, the Quechan Tribe claimed that the project would not avoid most of the 459 cultural sites identified, and that the NEPA and NHPA process had been insufficient.[29] In determining that the irreparable harm element of the test for issuance of injunctive relief was met, the court found that the Tribe's evidence showed that phase one of the project would involve damage to at least one known site, and "virtually ensure[d] some loss or damage."[30]

Here, however, the intervenors' allegations and their supporting declarations lack the specificity needed to demonstrate a serious, immediate, and irreparable harm to cultural and historic resources. As the Eighth Circuit has said, "[A] party must show that the harm is certain and great and of such imminence that there is a clear and present need for equitable relief."[31] In this case, the intervenors have not shown that the activities proposed at the Dewey Burdock site are imminent nor that the harm is certain. Indeed, the intervenors have not shown that a clear and present need exists for a stay nor have they addressed the argument that the Programmatic Agreement protects the cultural and historic resources in the area.

Even if it was certain that irreparable harm would result from Powertech's pre-construction activities, staying the effectiveness of the NRC materials license will not forestall these injuries. The NRC license, for which a stay is sought, was issued pursuant to 10 C.F.R. Part 40. It authorizes Powertech to receive, acquire, possess, transfer, use, and deliver

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[28] United States v. Jenkins, 714 F. Supp. 2d 1213, 1222 (S.D. Ga. Dec. 5, 2008) ("Harming Native American artifacts would constitute an irreparable injury because artifacts are, by their nature, unique, and their historical and cultural significance make them difficult to value monetarily.").

[29] Quechan Tribe v. U.S. Dep't of the Interior, 755 F. Supp. 2d 1104, 1106–07 (S.D. Cal. Dec. 15, 2010).

[30] Id. at 1120.

[31] Iowa Util. Bd. v. FCC, 109 F.3d 418, 425 (8th Cir. 1996).

byproduct, source, and special nuclear material.[32] Further, the license permits Powertech to commence construction, as construction is defined in 10 C.F.R. § 40.4. Construction is defined as:

> the installation of wells associated with radiological operations (e.g., production, injection, or monitoring well networks associated with in-situ recovery or other facilities), the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security.[33]

The term "construction" in Part 40 specifically excludes site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values.[34] It also excludes excavation and preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas.[35]

At oral argument, counsel for Powertech stated, without contradiction, that the ground disturbing work contemplated for the next few months could be accomplished without the NRC license.[36] Therefore, staying the license would not address the intervenors' concerns nor would it protect any cultural or historic sites. Indeed, counsel for the NRC Staff observed that in its view having the license remain in effect was more protective because the staff could then take

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[32] Materials License, NRC Form 374 (Apr. 8, 2014) at 1 (ADAMS Accession No. ML14043A392).

[33] 10 C.F.R. § 40.4.

[34] Id.

[35] Id.

[36] Tr. at 592–93.

enforcement actions should it find violations of the NRC license or the Programmatic Agreement.[37]

Based on the C.F.R. definitions, staying the effectiveness of Powertech's NRC issued license would have a very limited and incomplete effect on preventing the irreparable injuries the Intervenors claim Powertech may cause. Even if its NRC license is stayed by the Board, Powertech will still be permitted to engage in the earth moving activities on which the irreparable injury claim is premised. As a result, the injuries alleged in the Intervenors' motions are not redressable by the Board granting a stay of Powertech's license. The Board declines to issue an Order which would have no practical effect.[38]

B. Likelihood to Prevail on the Merits

At its heart, the dispute over a stay boils down to a disagreement over the NHPA consultation process. Intervenors argue that the process by which the Programmatic Agreement was created was inadequate, and therefore fails to fully protect the Tribe's sensitive and significant historic and cultural resources. Powertech and the NRC Staff disagree and believe the Programmatic Agreement memorialized a fair and adequate process that fully protects all potential cultural and historic resources at the Dewey-Burdock sites.

This issue will be adjudicated by this Board at the upcoming evidentiary hearing.[39] At this hearing, and in the prefiled statements of position and testimony, all parties will have the

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[37] Tr. at 620.

[38] In Pacific Gas and Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-03-10, 58 NRC 127, 129 (2003) the Commission held a stay request in abeyance during settlement negotiations, basing the delay, in part, on the rationale that "in practical terms, [the stay request would have] no current effect." See also Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Unit 3), LBP-74-42, 7 AEC 1022, 1037 (1974) (declining to take a "meaningless" action and allow a hearing request when that hearing had already been held). In the context of Article III standing, a court may only hear a case when the relief requested is likely to redress the injury. Lujan v. Defenders of Wildlife, 504 U.S. 555, 590 (1992).

[39] Memorandum (Summarizing the February 12, 2014 Teleconference) (Feb. 20, 2014) at Appendix A (unpublished) (setting the evidentiary hearing to begin on August 19, 2014).

opportunity to present specific and detailed evidence supporting their respective positions to the Board. The Board will then make its decision based on this specific and detailed evidence. Since the potential harm is not redressable by the Board, we decline to make any estimation as to the Intervenors' likelihood of success on the merits at this point in time.

IV. BOARD ORDER

The Board rules that:

A. The temporary stay of Materials License Number SUA-1600, issued April 30, 2014[40] is lifted.

B. The motions for a stay of the effectiveness of Materials License Number SUA-1600 filed by Consolidated Intervenors and the Oglala Sioux Tribe on April 14, 2014[41] are denied.

C. As the Board ruled during the May 13, 2014 teleconference,[42] the unopposed Joint Motion to Clarify Filing Deadlines filed on April 30, 2014[43] is granted.

D. Consolidated Intervenors' Motion to Strike Pages 11-21 of Powertech Response to Stay filed May 13, 2014[44] was untimely[45] and is therefore denied.[46]

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[40] Order (Temporarily Granting Stay of Materials License Number SUA-1600) (Apr. 30, 2014) (unpublished).

[41] OST Stay Motion; CI Stay Motion.

[42] Tr. at 635.

[43] Joint Motion to Clarify Filing Deadlines (Apr. 30, 2014).

[44] Consolidated Intervenors' Motion to Strike Pages 11-21 of Powertech Response to Stay (May 13, 2014).

[45] 10 C.F.R. § 2.323(a)(2) requires all motions to be filed within ten days from the occurrence which triggers the motion. This motion to strike was filed eight days after this ten day period ended on May 5, 2014. Tr. at 636.

[46] The Board, however, notes that it finds Powertech's answer in violation of the Commission's regulations because it exceeded the ten-page reply length intended by 10 C.F.R. § 2.342(d). The regulation permits an answer to be filed "opposing the granting of a stay. This answer may

E. No specific section of the Commission's regulations, including 10 C.F.R. § 2.1210 and 10 C.F.R. § 2.1212, permits appeals from an order ruling on a request for a stay of the effectiveness of the NRC staff's action on a matter involved in a hearing under Subpart L. Nonetheless, interlocutory review of decisions and actions of a presiding officer may be available pursuant to § 2.341(f)(2) of the Commission's regulations.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

William J. Froehlich, Chair
ADMINISTRATIVE JUDGE

/RA/

Richard F. Cole
ADMINISTRATIVE JUDGE

/RA/

Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
May 20, 2014

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not be longer than ten (10) pages." The regulation contemplates a single ten-page opposition to a stay, not ten pages of opposition to each motion filed.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
POWERTECH (USA) INC.	)	Docket No. 40-9075-MLA
(Dewey-Burdock In Situ Recovery Facility)	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **ORDER (Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600)** have been served upon the following persons by Electronic Information Exchange, and by electronic mail as indicated by an asterisk*****.

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POWERTECH (USA) INC., DEWEY-BURDOCK IN SITU RECOVERY FACILITY
DOCKET NO. 40-9075-MLA
ORDER (Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600)

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[Original signed by Clara Sola]
Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 20th day of May 2014.

Cite as 81 NRC 618 (2015) **LBP-15-16**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Mark O. Barnett

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium
Recovery Facility) **April 30, 2015**

ATOMIC ENERGY ACT (AEA): MATERIALS LICENSE

The AEA and the Uranium Mill Tailings Radiation Control Act of 1978 authorize the NRC to issue licenses for the possession and use of source material and byproduct material. Section 11e(2) byproduct material is regulated by the NRC under 10 C.F.R. Part 40. These statutes require the NRC to license facilities that meet NRC regulatory requirements developed to protect public health and safety from radiological hazards. To operate, ISL uranium recovery facilities must meet NRC regulatory requirements and obtain a source materials license.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): ENVIRONMENTAL IMPACT STATEMENT

NEPA requires that federal agencies prepare a detailed environmental impact statement for proposed actions "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). The adverse environmental effects that must be assessed under NEPA include "aesthetic, historic, cultural, economic, social, or health" effects. 40 C.F.R. § 1508.8(b).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): HARD LOOK

While reviewing any adverse effects, federal agencies must take a hard look at the environmental impacts of a proposed action. *See Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998). This hard look must emerge from engagement in informed and reasoned decisionmaking, as the agency "obtains opinions from its own experts, obtains opinions from experts outside the agency, gives careful scientific scrutiny and responds to all legitimate concerns that are raised." *Hughes River Watershed Conservancy v. Johnson*, 165 F.3d 283, 288 (4th Cir. 1999) (citing *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 378-85 (1989)).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): ADJUDICATORY RECORD PART OF ENVIRONMENTAL IMPACT STATEMENT

In an NRC adjudicatory proceeding, the Board's findings, as well as the adjudicatory record, "become, in effect, part of the [final EIS]." *Claiborne*, CLI-98-3, 47 NRC at 89.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): BURDEN OF PROOF

The statutory obligation of complying with NEPA rests with the NRC. *See, e.g., Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983). When NEPA contentions are involved, the burden of proof lies with the NRC Staff, but because "the Staff, as a practical matter, relies heavily upon the Applicant's [Environmental Report] in preparing the EIS, should the Applicant become a proponent of a particular challenged position set forth in the EIS, the Applicant, as such a proponent, also has the burden on that matter." *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 339 (1996) (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978)), *rev'd on other grounds*, CLI-97-15, 46 NRC 294 (1997).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): SCOPE OF EFFECTS OF A PROJECT

Under NEPA regulations, defining the scope of effects of a project requires engagement with the governments of affected tribes through an "early and open process," aimed at identifying concerns, potential impacts, relevant effects of past

actions, and possible alternative actions. 40 C.F.R. § 1501.7. The Commission's regulations in 10 C.F.R. § 51.71(b) require the NRC Staff to include in the FSEIS "an analysis of significant problems and objections raised by . . . any affected Indian tribes, and by other interested persons."

NATIONAL HISTORIC PRESERVATION ACT (NHPA): REASONABLE AND GOOD FAITH EFFORT

Under the National Historic Preservation Act, a federal agency must make a reasonable and good faith effort to identify historic properties, determine whether identified properties are eligible for listing on the National Register based on the criteria in 36 C.F.R. § 60.4, assess the effects of the undertaking on any eligible historic properties found, determine whether the effect will be adverse, and avoid or mitigate any adverse effects. 36 C.F.R. §§ 800.4(b), (c); 800.5(c); 800.8(c); 800.9(b), (c).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) NATIONAL HISTORIC PRESERVATION ACT (NHPA): STATUTORY COMPLIANCE

Although the NHPA and NEPA resemble each other in certain respects, compliance with the NHPA "does not relieve a federal agency of the duty of complying with the [environmental] impact statement requirement 'to the fullest extent possible.'" *Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851, 859 (9th Cir. 1982) (quoting 42 U.S.C. § 4332). It does not follow that a review that satisfies the NHPA necessarily satisfies NEPA requirements to take a hard look at cultural resources affected by a project.

NATIONAL HISTORIC PRESERVATION ACT (NHPA): NATIONAL REGISTER

The NHPA requires federal agencies, prior to approving any "undertaking," to "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." 16 U.S.C. § 470f.

NATIONAL HISTORIC PRESERVATION ACT (NHPA): TRIBAL CONSULTATION

The NHPA requires federal agencies to "consult with any Indian tribe . . . that attaches religious and cultural significance" to a site. 16 U.S.C. § 470a(d)(6)(B).

Consultation must provide the tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects." 36 C.F.R. § 800.2(c)(2)(ii)(A). The NHPA further requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government and Indian tribes." *Id.*

NATIONAL HISTORIC PRESERVATION ACT (NHPA): ADEQUACY OF TRIBAL CONSULTATION

Adequate NRC face-to-face meaningful government-to-government consultation requirements are not satisfied by large group meetings, with members of many diverse tribes, all with varying degrees of attachment to the project area. Tribal Protocol Manual, NUREG-2173, at 10. Quantity of correspondence does not necessarily equate with meaningful or reasonable consultation, and "doesn't in itself show the NHPA-required consultation occurred." *Quechan Tribe of Fort Yuma Indian Reservation v. U.S. Department of Interior,* 755 F. Supp. 2d 1104, 1118 (S.D. Cal. 2010).

NATIONAL HISTORIC PRESERVATION ACT (NHPA): PROGRAMMATIC AGREEMENT

A Programmatic Agreement may be used to implement the section 106 process in situations where the effects to historic properties cannot be fully determined prior to the approval of an undertaking, such as where an applicant proposes a phased approach to developing its project. 36 C.F.R. §§ 800.13, 800.14(b)(1). In such cases, the Programmatic Agreement establishes a phased process for consultation, review, and compliance with the NHPA.

RULES OF PRACTICE: BOARD-ORDERED SUSPENSION OF NRC LICENSE

A Board can require the immediate suspension of an issued materials license. *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 238 (2008) ("If the Board determines after full adjudication that the license amendment should not have been granted, it may be revoked (or conditioned).").

REGULATIONS: INTERPRETATION (10 C.F.R. PART 40, APPENDIX A, CRITERION 7)

Criterion 7 of 10 C.F.R. Part 40, Appendix A requires an applicant to establish "a preoperational monitoring program [that] must be conducted to provide complete baseline data on a milling site and its environs." These criteria were developed for conventional uranium milling facilities, but have been applied, in at least limited fashion, to ISL facilities. *Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 8-9 (1999).

REGULATIONS: INTERPRETATION (WATER QUALITY DATA)

Background water quality data are used to establish existing hazardous constituent concentrations in an aquifer, which can then be used to set 10 C.F.R. Part 40, Appendix A, Criterion 5B(5) post-operational concentration limits. Both NUREG-1569 and Regulatory Guide 4.14 also discuss environmental monitoring.

REGULATIONS: INTERPRETATION (WATER QUALITY DATA)

The language of Appendix A regarding the relationship between Criteria 5 and 7 is ambiguous and the terms "baseline" and "background" are not explicitly defined. But in *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 6 (2006), the Commission affirmed that given the sequential development of ISL wellfields, waiting until after licensing (although before mining operations begin) to establish definitively the groundwater quality baselines and upper control limits is consistent with industry practice and NRC methodology.

TECHNICAL ISSUES DISCUSSED: CONFINEMENT OF THE OVERALL ORE ZONE

Geologic confinement of an ore zone is required for an ISL license. This decision discusses issues surrounding the continuous thickness of the Fuson Shale, leakage shown by pumping tests, rapid groundwater flow, faults, fractures, and joints, breccia pipes, boreholes, the ability to contain fluid migration, artesian flow, and groundwater quantity impacts.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): MITIGATION

Mitigation under NEPA is defined as (a) avoiding an impact by not taking an action, (b) minimizing an impact by limiting the degree or magnitude of an action,

(c) rectifying the impact of an action by repairing, rehabilitating, or restoring the impacted area, (d) reducing or eliminating the impact over time by preservation and maintenance operations, or (e) compensating for the impact or replacing or substituting resources or environments. 40 C.F.R. § 1508.20.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): NRC STAFF MITIGATION MONITORING REQUIREMENT

The NRC Staff is required to confirm whether applicant/licensee mitigation measures are effective by establishing a monitoring program. 76 Fed. Reg. at 3849 (citing 40 C.F.R. § 1505.2(c)).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): CONNECTED ACTIONS

Actions are connected to the proposed project when they "(i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1)(i)-(iii). When drafting an EIS, an agency's scope of review must include analysis of any connected or cumulative actions to the central proposed action. 40 C.F.R. § 1508.25; 10 C.F.R. § 51.14(b).

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): CUMULATIVE ACTIONS

Cumulative impacts are impacts resulting "from the incremental impact of the [proposed] action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. All aspects of the FSEIS, including the connected and cumulative actions discussions, must have been subjected to a hard look by the NRC Staff.

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

To be admissible, a new or amended contention must satisfy the substantive contention admissibility standards set forth in 10 C.F.R. § 2.309(f)(1).

RULES OF PRACTICE: CONTENTIONS (NEW OR AMENDED; ADMISSIBILITY)

A new or amended contention must be timely filed under 10 C.F.R. § 2.309(c).

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PARTIAL INITIAL DECISION

I. INTRODUCTION

Today, the Licensing Board rules on seven contentions raised by the Oglala Sioux Tribe and the Consolidated Intervenors that were the subject of an evidentiary hearing held on August 19, 20, and 21, 2014, at the Hotel Alex Johnson in Rapid City, South Dakota. The evidentiary record in this proceeding consists of the written direct testimony of 22 witnesses, 430 exhibits that were admitted into evidence, and the examination under oath of the witnesses by the Licensing Board, as recorded in the transcript of the evidentiary hearing. The parties were also afforded an opportunity to file initial and reply proposed findings of fact and conclusions of law after the hearing. This Partial Initial Decision upholds the NRC Staff issuance of Source Materials License No. SUA-1600, while imposing additional license conditions.

II. BACKGROUND

On February 25, 2009, Powertech (USA), Inc. (Powertech) submitted an application for a combined source[1] and 11e(2) byproduct material license[2] to construct

[1] The Atomic Energy Act of 1954, as amended [hereinafter AEA] defines "source material" in section 11z. 42 U.S.C. § 2014(z); *see also* 10 C.F.R. § 40.4. "Source material" in this decision refers to the uranium being extracted through the ISL process.

[2] The AEA defines "byproduct material" in section 11e(2). 42 U.S.C. § 2014(e)(2); *see also* 10 C.F.R. §§ 30.4 and 40.4. "Byproduct material" in this decision refers to "the tailings or wastes

(Continued)

and operate the proposed Dewey-Burdock in-situ leach (ISL or ISR) uranium recovery facility[3] in Custer and Fall River Counties, South Dakota.[4] Powertech withdrew that application in June 2009 and revised it to provide additional information requested by the NRC Staff on hydrology/site characterization, waste disposal, location of extraction operations, protection of water resources, and operational issues.[5] On August 10, 2009 Powertech resubmitted its Dewey-Burdock license application with additional data and information, including its Environmental Report.[6] The NRC Staff accepted Powertech's application for docketing on October 2, 2009,[7] and on January 5, 2010, published a notice of opportunity to request a hearing on the application, which included instructions on how to gain access to sensitive unclassified nonsafeguards information (SUNSI) associated with the application.[8]

Two groups submitted requests for access to SUNSI material. On January 15,

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produced by the extraction or concentration of uranium or thorium from any ore processed for its source material content." 42 U.S.C. § 2014(e)(2).

[3] ISL facilities are designed to remove underground uranium without physical mining. An aqueous solution, called a lixiviant, is injected into a naturally occurring underground aquifer through an injection well, dissolving the uranium. When pumped back to the surface, the uranium is removed from the lixiviant. This same lixiviant is then reinjected into the ground to dissolve more uranium, and the cycle is repeated until all the economically recoverable uranium in the ore body has been removed. *See* LBP-10-16, 72 NRC 361, 378-80 (2010) for further details on this process.

[4] [Powertech's] Submission of an Application for a Nuclear Regulatory Commission Uranium Recovery License for Its Proposed Dewey-Burdock In-Situ Leach Uranium Recovery Facility in the State of South Dakota, Letter from Richard Blubaugh, Vice-President of Environmental Health and Safety Resources, Powertech, to Charles Miller, Director, Office of Federal and State Materials and Environmental Management Program, NRC (Feb. 25, 2009) (ADAMS Accession No. ML091030707).

[5] Dewey-Burdock Project Supplement to Application for NRC Uranium Recovery License Dated February 2009 (Aug. 2009) (ADAMS Accession No. ML092870155).

[6] Exs. NRC-008-A-1 through NRC-008-B-2, Office of Federal and State Materials and Environmental Management Programs, Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Final Report, NUREG-1910 (Supp. 4 Jan. 2014), Ex. NRC-008-A-1 at 1-1 (ADAMS Accession Nos. ML14024A477 (Chapters 1-5) and ML14024A478 (Chapters 6-11 and Appendices)) [hereinafter FSEIS, Exs. NRC-008-A-1 through NRC-008-B-2]; *see also* Exs. APP-040-A through APP-040-EE, Powertech Application for NRC Uranium Recovery License Proposed Action Fall River and Custer Counties South Dakota Environmental Report (Feb. 2009).

[7] Results of Acceptance Review, Powertech (USA), Inc.'s Proposed Dewey-Burdock Facility, Fall River and Custer Counties, South Dakota, Letter from Ronald Burrows, Project Manager, NRC, to Richard Blubaugh, Vice-President of Environmental Health and Safety Resources, Powertech (Oct. 2, 2009) (ADAMS Accession No. ML092610201).

[8] Notice of Opportunity for Hearing, License Application Request of Powertech (USA) Inc. Dewey-Burdock In Situ Uranium Recovery Facility in Fall River and Custer Counties, SD, and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information (SUNSI) for Contention Preparation, 75 Fed. Reg. 467 (Jan. 5, 2010).

2010, the Oglala Sioux Tribe requested access to SUNSI in this proceeding,[9] and was granted access by the NRC Staff on January 25, 2010.[10] As a result, a Protective Order granting access to the requested information was issued by the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel on March 5, 2010.[11] The Oglala Sioux Tribe filed its Hearing Request and Petition for Leave to Intervene on April 6, 2010.[12] Powertech and the NRC Staff filed answers to the Oglala Sioux Tribe Petition on May 3, 2010,[13] and the Oglala Sioux Tribe filed its reply to the Powertech and NRC Staff answers on May 14, 2010.[14]

Also on January 15, 2010, six individuals and two organizations sharing common counsel (Consolidated Petitioners) submitted a request for access to SUNSI material,[15] which was denied by the NRC Staff.[16] Consolidated Petitioners then joined a motion filed by the Oglala Sioux Tribe for a 90-day extension of time to file a hearing request, which was opposed by both Powertech and the NRC Staff, and was subsequently denied by the Commission on March 5, 2010.[17] On March 8, 2010, Consolidated Petitioners filed their Request for Hearing and Petition for Leave to Intervene,[18] and this Licensing Board was established on

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[9] The Oglala Sioux Tribe asserted that the water resources within the area to be mined were "known to have been favored camping sites of indigenous peoples, both historically and prehistorically, and the likelihood that cultural artifacts and evidence of burial grounds exist in these areas is strong." Oglala Sioux Tribe Request for Sensitive Unclassified Non-Safeguards Information (Jan. 15, 2010) (ADAMS Accession No. ML100210203).

[10] *See* NRC Staff Response to Grace Dugan Granting Access to SUNSI Information (Jan. 25, 2010) (ADAMS Accession No. ML100252221).

[11] Licensing Board Order (Protective Order Governing the Disclosure of Sensitive Unclassified Non-Safeguards Information (SUNSI)), (Mar. 5, 2010) (unpublished) (ADAMS Accession No. ML100640405).

[12] Ex. OST-010, Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe at 22-23 (Apr. 6, 2010) [hereinafter Oglala Sioux Tribe Petition, Ex. OST-010].

[13] Applicant Powertech (USA) Inc.'s Response to Petitioner Oglala Sioux Tribe's Request for a Hearing/Petition for Intervention (May 3, 2010) (ADAMS Accession No. ML101230722); NRC Staff's Response to Oglala Sioux Tribe's Hearing Request (May 3, 2010) (ADAMS Accession No. ML101230726).

[14] Reply to NRC Staff and Applicant Responses to the Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (May 14, 2010) (ADAMS Accession No. ML101340870).

[15] E-mail Request from David Cory Frankel, Legal Director for Aligning for Responsible Mining, *et al.* for Access to Sensitive Unclassified Non-safeguards Information (SUNSI) (Jan. 15, 2010) (ADAMS Accession No. ML100192098).

[16] NRC Staff Response to David Frankel Denying Request for Access to SUNSI Information (Jan. 25, 2010) (ADAMS Accession No. ML100252219).

[17] Order of the Secretary (Mar. 5, 2010) (unpublished) (ADAMS Accession No. ML100640426).

[18] Ex. INT-016, Consolidated Request for Hearing and Petition for Leave to Intervene (Mar. 8,

(Continued)

March 12, 2010.[19] After requesting and being granted an extension of time by this Licensing Board,[20] Powertech and the NRC Staff filed their answers to the Consolidated Petition on April 12, 2010,[21] and Consolidated Petitioners filed their reply to the Powertech and NRC Staff answers on April 22, 2010.[22]

On April 30, 2010, Consolidated Petitioners filed a new contention, Contention K, based on SUNSI material provided to Consolidated Petitioners' expert by the NRC Staff on April 1, 2010.[23] Answers to Contention K were timely filed by the NRC Staff and Powertech on May 21, 2010, and May 23, 2010 respectively.[24] The Consolidated Petitioners did not file a reply to these answers.[25]

The Board held oral argument on standing and contention admissibility in Custer, South Dakota, on June 8 and 9, 2010.[26] On August 5, 2010, the Board ruled on both petitions to intervene and requests for hearings,[27] admitting the Oglala Sioux Tribe and the Consolidated Petitioners (re-designated Consolidated Intervenors) as Intervenors.[28] The Board also admitted four of the contentions

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2010) [hereinafter Consolidated Intervenors' Petition, Ex. INT-016]. David Frankel, Esq., filed the Petition on his own behalf and on behalf of the following persons and organizations: Theodore P. Ebert, Gary Heckenlaible, Susan Henderson, Dayton Hyde, Lilias C. Jones Jarding, the Clean Water Alliance, and Aligning for Responsible Mining. *Id.* at 1.

[19] Establishment of Atomic Safety and Licensing Board (Mar. 12, 2010) (unpublished); *see also* Powertech (USA), Inc.; Establishment of Atomic Safety and Licensing Board, 75 Fed. Reg. 13,141 (Mar. 18, 2010).

[20] *See* Joint Motion for Extension of Time for Late-Filed Contentions and to Respond to Request for Hearing (Mar. 31, 2010) (ADAMS Accession No. ML100900058); Licensing Board Order (Granting Motion for Extension of Time) (Apr. 1, 2010) (unpublished) (ADAMS Accession No. ML100910251). This Order also granted Consolidated Petitioners additional time to file new or amended contentions based on information recently released by the NRC Staff. *Id.* at 2.

[21] Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for a Hearing/Petition for Intervention (Apr. 12, 2010) (ADAMS Accession No. ML101020722); NRC Staff Response to Hearing Request of Consolidated Petitioners (Apr. 12, 2010) (ADAMS Accession No. ML101020723).

[22] Petitioners' Consolidated Reply to Applicant and NRC Staff Answers to Hearing Request/Petition to Intervene (Apr. 19, 2010) (ADAMS Accession No. ML101100001) [hereinafter Consolidated Intervenors' New Petition].

[23] Petitioners' Request for Leave to File a New Contention Based on SUNSI Material (Apr. 30, 2010) (ADAMS Accession No. ML101200675).

[24] NRC Staff's Response to Consolidated Petitioners' Contention filed April 30, 2010 (May 21, 2010) (ADAMS Accession No. ML1014105410); Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for Leave to File a New Contention Based on SUNSI Material (May 23, 2010) (ADAMS Accession No. ML1014300009).

[25] Tr. at 381.

[26] Tr. at 1-405.

[27] LBP-10-16, 72 NRC at 361.

[28] *Id.* at 376.

proposed by the Oglala Sioux Tribe[29] and three of the contentions proffered by the Consolidated Intervenors.[30]

In the meantime, the NRC Staff began preparing the environmental and safety reviews related to the Powertech application. The NRC Staff issued a Safety Evaluation Report (SER) in March 2013[31] and an SER (Revised) in April 2014.[32]

The NRC Staff issued requests for additional information (RAIs) to Powertech on environmental matters,[33] and on November 26, 2012, the NRC Staff issued a Draft Supplemental Environmental Impact Statement (DSEIS) for public comment.[34] On January 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors filed proposed contentions relating to the DSEIS.[35] On March 7, 2013, the NRC Staff filed its response to the proposed contentions,[36] followed on March 11, 2013, by the Powertech response.[37] On March 25, 2013, both the Oglala Sioux Tribe and the Consolidated Intervenors submitted replies in support of their respective motions for new contentions.[38]

On July 22, 2013, the Board concluded that three new contentions proposed in

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[29] *Id.* at 444.

[30] *Id.* at 443.

[31] Ex. NRC-135, Office of Federal and State Materials and Environmental Management Programs, Safety Evaluation Report for the Dewey-Burdock Project (Mar. 2013) [hereinafter SER (Mar. 2013), Ex. NRC-135].

[32] Ex. NRC-134, Office of Federal and State Materials and Environmental Management Programs, Safety Evaluation Report (Revised) for the Dewey Burdock Project (Apr. 2014) [hereinafter SER (Revised) (Apr. 2014) Ex. NRC-134]. This revised SER corrected certain technical references.

[33] Ex. APP-050, Letter from Richard Blubaugh, Vice-President of Environmental Health and Safety Resources, Powertech, to Ron Burrows, Project Manager, NRC (Aug. 12, 2010); *see also* Powertech (USA) Inc.'s Response to the Request for Additional Information to Support the Environmental Review of its Application (Aug. 26, 2010) (ADAMS Accession No. ML102380530); Powertech (USA), Inc.'s Responses to the U.S. Nuclear Regulatory Commission (NRC) Staff's Verbal and Email Requests for Clarification of Selected Issues Related to the Dewey-Burdock Uranium Project Environmental Review (Nov. 4, 2010) (ADAMS Accession No. ML103140318).

[34] Exs. NRC-009-A-1 through NRC-009-B-2, Office of Federal and State Materials and Environmental Management Programs, Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Draft Report for Comment, NUREG-1910 (Supp. 4 Nov. 2014) [hereinafter DSEIS, Exs. NRC-009-A-1 through NRC-009-B-2].

[35] *See* List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013); Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013).

[36] NRC Staff's Answer to Contentions on the [DSEIS] (Mar. 7, 2013).

[37] Applicant Powertech (USA) Uranium Corporation's Response to Consolidated Petitioners' Request for a Hearing/Petition for Intervention (Mar. 11, 2013).

[38] Consolidated Intervenors' Consolidated Reply Re: DSEIS (Mar. 25, 2013); Consolidated Reply of the Oglala Sioux Tribe (Mar. 25, 2013).

response to the DSEIS were admissible, and that seven of the original contentions were admissible because of the migration tenet.[39]

On September 19 and 20, 2013, the Board conducted a site visit of the Dewey-Burdock site to which all parties and other interested participants were invited. Details regarding the site visit were made public before and after the visit.[40] At the site visit, the Board and other attendees viewed the Dewey-Burdock site, the entrance to one property owned by Intervenor Dayton Hyde, another by Intervenor Susan Henderson, and the exterior of the operational Cameco Crow Butte ISL facility in Crawford, Nebraska.[41]

On January 29, 2014, the NRC Staff issued a notice of public availability[42] of the Final Supplemental Environmental Impact Statement (FSEIS),[43] updating the information in the DSEIS. The FSEIS added an Appendix E, which presents the public comments received on the DSEIS and the NRC Staff's responses. On March 17, 2014, both the Oglala Sioux Tribe and the Consolidated Intervenors filed "Statements of Contentions" with proposed contentions relating to the FSEIS.[44] The Oglala Sioux Tribe filed ten contentions and the Consolidated Intervenors filed five contentions. On April 4, 2014, Powertech and the NRC Staff filed answers opposing the proposed contentions.[45] On April 11, 2014, the Oglala Sioux Tribe and the Consolidated Intervenors filed replies to the NRC Staff and Powertech answers.[46] The Board concluded that the previously admitted

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[39] LBP-13-9, 78 NRC 37, 43 (2013). The migration tenet applies when the information in the DEIS is sufficiently similar to the information in the applicant's environmental report, and allows previously admitted contentions challenging the environmental report to apply to relevant portions of the DSEIS. *See id.*; *see also Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-1, 73 NRC 19, 26 (2011).

[40] *See* Licensing Board Order (Site Visit Information and Schedule) (Sept. 17, 2013) (unpublished); Licensing Board Order (Amending Site Visit Schedule) (Sept. 5, 2013) (unpublished); Licensing Board Order (Scheduling Site Visit) (Aug. 21, 2013) (unpublished); Licensing Board Memorandum (Memorializing Site Visit) (Sept. 24, 2013) (unpublished).

[41] Licensing Board Memorandum (Memorializing Site Visit) (Sept. 24, 2013) at 2-3 (unpublished).

[42] In the Matter of Powertech (USA) Inc., Letter from Patricia Jehle, Counsel for NRC Staff, to Administrative Judges and Parties (Jan. 29, 2014).

[43] FSEIS, Exs. NRC-008-A-1 through NRC-008-B-2.

[44] Statement of Contentions of the Oglala Sioux Tribe Following Issuance of [FSEIS] (Mar. 17, 2014); Consolidated Intervenors' Statement of Contentions (Mar. 17, 2014).

[45] Applicant Powertech (USA) Inc's Response to Consolidated Petitioners' Request for Admission of New or Amended Contentions on NUREG-1910, Supplement 4 (Apr. 4, 2014); NRC Staff's Answer to Contentions on [FSEIS] (Apr. 4, 2014).

[46] Reply of the Oglala Sioux Tribe Regarding Contentions Following Issuance of [FSEIS] (Apr. 11, 2014); Consolidated Intervenors' Consolidated Reply to Applicant and NRC Staff Answers to Contentions on [FSEIS] (Apr. 11, 2014).

contentions that referred to the DSEIS migrated to the FSEIS, and that the additional proposed FSEIS contentions were inadmissible.[47]

Meanwhile, on April 8, 2014, the NRC Staff issued NRC Source Materials License No. SUA-1600 to Powertech.[48] The license allows Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock Project.[49] Pursuant to 10 C.F.R. § 2.1213 the Oglala Sioux Tribe and Consolidated Intervenors filed motions to stay the license.[50] The Oglala Sioux Tribe also filed an answer in support of the Consolidated Intervenors' stay motion.[51] On April 24, 2014, the NRC Staff and Powertech filed oppositions to Intervenors' motions.[52] Pending oral argument on the motions, the Board temporarily granted the stay request.[53]

On May 13, 2014, the Board held a telephonic oral argument on the stay motion.[54] A week later, on May 20, 2014, the Board lifted its temporary stay and denied Intervenors' stay motions.[55]

On April 11, 2014, both the NRC Staff and the Oglala Sioux Tribe filed motions for summary disposition.[56] On April 25, 2014, responses to the motions

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[47] LBP-14-5, 79 NRC 377, 401 (2014).

[48] Ex. NRC-012, SUA-1600 Materials License, NRC Form 374 (Apr. 8, 2014) [hereinafter Powertech Materials License, Ex. NRC-012]; *see also* ADAMS Accession Package Number ML14043A052, which includes the license transmittal letter, the license, and the Final Safety Evaluation Report. The NRC Staff also issued its Record of Decision for the Dewey-Burdock Uranium In-Situ Recovery (ISR) Project at ADAMS Accession No. ML14066A466. The Final Programmatic Agreement was executed April 7, 2014, and is available in ADAMS Accession Package No. ML14066A344.

[49] Powertech Materials License, Ex. NRC-012, at 1.

[50] Oglala Sioux Tribe's Motion for Stay of Effectiveness of License (Apr. 14, 2014); Consolidated Intervenors' Application for a Stay of the Issuance of License No. SUA-1600 Under 10 CFR Section 2.1213 (Apr. 14, 2014).

[51] Oglala Sioux Tribe's Answer in Support of Consolidated Intervenors' Motion for Stay of Effectiveness of License (Apr. 24, 2014).

[52] NRC Staff's Opposition to Application for a Stay (Apr. 24, 2014); Powertech (USA) Inc's Response to Consolidated Intervenors and the Oglala Sioux Tribe Motions for Stay of the Effectiveness of NRC License No. SUA-1600 (Apr. 24, 2014).

[53] Licensing Board Order (Temporarily Granting Stay of Materials License Number SUA-1600) (Apr. 30, 2014) (unpublished).

[54] Tr. at 578-637.

[55] Licensing Board Order (Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600) (May 20, 2014) at 6-8 (unpublished).

[56] NRC Staff's Motion for Summary Disposition on Safety Contentions 2 and 3 (Apr. 11, 2014) (seeking summary disposition on the safety aspects of Contentions 2 and 3); Oglala Sioux Tribe's Motion for Summary Disposition National Environmental Policy Act Contentions 1A and 6 — Mitigation Measures (Apr. 11, 2014) (seeking summary disposition of NEPA issues in Contentions 1A and 6).

for summary disposition were filed by all parties.[57] The Board denied both parties' motions on June 2, 2014.[58]

On June 20, 2014, the Oglala Sioux Tribe voluntarily withdrew Contentions 14A and 14B.[59] On July 15, 2014, the Board dismissed these contentions based on this voluntary withdrawal.[60] On August 18, 2014, the Board held a Limited Appearance Session[61] to allow members of the public who were not parties to the adjudication to provide the Board with oral statements setting forth their positions on matters related to the admitted contentions.[62] On August 19, 20, and 21, 2014, the Board held an evidentiary hearing at the Hotel Alex Johnson in Rapid City, South Dakota, concerning the seven contentions raised by the Oglala Sioux Tribe and the Consolidated Intervenors.[63] At the hearing the Board heard argument from counsel and testimony from witnesses for each party, and admitted party exhibits into the evidentiary record, with an exhibit list bound into the hearing transcript.[64]

On August 16, 2014, just prior to the evidentiary hearing, the Oglala Sioux Tribe filed a motion[65] seeking disclosure of certain data logs referred to by Powertech in an August 7, 2014 e-mail[66] and other documents referenced in a filing required by Canadian securities laws. At the hearing the Board heard argument from counsel and asked each party's geologic witnesses questions

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[57] NRC Staff's Response to Oglala Sioux Tribe's Motion for Summary Disposition (Apr. 25, 2014); Powertech (USA) Inc's Response to Oglala Sioux Tribe and NRC Staff Motions for Summary Disposition (Apr. 25, 2014); Oglala Sioux Tribe's Response to NRC Staff's Motion for Summary Disposition (Apr. 25, 2014); Consolidated Intervenors' Response to NRC Staff's Motion for Summary Disposition on Contentions 2 and 3 (Apr. 25, 2014).

[58] Licensing Board Order (Denying Motions for Summary Disposition) (June 2, 2014) at 7 (unpublished).

[59] Oglala Sioux Tribe's Statement of Position on Contentions (June 20, 2014) at 41-42 [hereinafter Oglala Sioux Tribe Statement of Position].

[60] Licensing Board Order (Granting Request to Withdraw and Motion to Dismiss Contentions 14A and 14B) (July 15, 2014) (unpublished).

[61] Atomic Safety and Licensing Board Hearing in the Matter of Powertech USA, Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), 79 Fed. Reg. 39,413 (July 10, 2014).

[62] At the morning session, thirty-six people made oral limited appearance statements. Transcript of Limited Appearance Session (Aug. 18, 2014) (ADAMS Accession No. ML14234A068). During the evening session, twenty-nine people addressed the Board. Transcript of Limited Appearance Session (Aug. 18, 2014) (ADAMS Accession No. ML14234A067). Fifty-three written limited appearance statements were received.

[63] Notice of Evidentiary Hearing, 79 Fed. Reg. 42,836 (July 23, 2014).

[64] Tr. at 692-1328.

[65] Oglala Sioux Tribe's Motion to Enforce Mandatory Disclosure Duties Under 10 C.F.R. § 2.336 (Aug. 16, 2014).

[66] E-mail from Christopher Pugsley, Powertech Counsel, to Licensing Board Judges, RE: NRC Proceeding "Powertech USA 40-9075-MLA" (Aug. 7, 2014); *see also* Ex. OST-019, Powertech Press Release, Powertech Uranium (Azarga Uranium) Enters into Data Purchase Agreement for Dewey-Burdock Project (July 16, 2014).

regarding the relevancy of Powertech's newly acquired data logs.[67] The Board then ruled that the data logs were relevant to Contention 3 and that an "opportunity for this data to be viewed by all parties to the case" must be given by Powertech to fulfill its mandatory disclosure duties.[68] In a post-hearing Order ruling on this dispute, the Board reiterated its conclusion that the logs and certain other information were relevant and must be made available to the Intervenors and the NRC Staff immediately.[69]

On October 9, 2014, the Oglala Sioux Tribe and Consolidated Intervenors jointly moved to extend the deadline for filing new contentions relative to the data log materials.[70] On October 14, 2014, the Oglala Sioux Tribe submitted new exhibits,[71] and the NRC Staff submitted supplemental testimony and exhibits.[72] On October 22, 2014, the Board granted Intervenors a 30-day extension to file any additional testimony/exhibits on Contention 3.[73] On November 7, 2014, the Oglala Sioux Tribe submitted two new contentions and further additional exhibits.[74] On November 13, 2014, the Board admitted the Oglala Sioux Tribe's and NRC Staff's new exhibits, and closed the record as it pertained to Contentions 1A, 1B, 2, 4, 6, and 9.[75] On November 21, 2014, the Oglala Sioux Tribe submitted its additional testimony and exhibits on Contention 3.[76] Powertech filed a response and additional exhibits/testimony on December 4, 2014,[77] and the NRC Staff filed its response and additional exhibits/testimony on December 9, 2014.[78] On December 10, 2014, the Board admitted all exhibits, requested further memoranda of law on whether any or all of the Oglala Sioux Tribe's

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[67] Tr. at 880-966.

[68] Tr. at 967.

[69] Licensing Board Post-Hearing Order (Sept. 8, 2014) at 7-8, 11-12 (unpublished).

[70] Oglala Sioux Tribe and Consolidated Intervenors' Motion to Extend Deadline for Submission of Testimony and Amend or File New Contentions (Oct. 9, 2014) [hereinafter Motion to Extend].

[71] Oglala Sioux Tribe Motion to Admit Additional Exhibits (Oct. 14, 2014).

[72] NRC Staff's Motion to Admit Testimony and Exhibits Addressing Powertech's September 14, 2014 Disclosures (Oct. 14, 2014) (submitting testimony and exhibits addressing the information disclosed by Powertech on September 14, 2014).

[73] Licensing Board Order (Granting in Part Motion to Extend Deadline) (Oct. 22, 2014) (unpublished).

[74] Motion for Leave to File New or Amended Contention on Behalf of the Oglala Sioux Tribe (Nov. 7, 2014); Oglala Sioux Tribe Unopposed Motion to Admit Additional Exhibits (Nov. 7, 2014). The admission of both these contentions is denied in Parts G.1 and G.2 of this Order. *See* Licensing Board Notice (Pursuant to 10 C.F.R. § 2.309(j)(1)) (Jan. 14, 2015) (unpublished).

[75] Licensing Board Order (Admitting New Exhibits and Closing the Evidentiary Record on Contentions 1A, 1B, 2, 4, 6 and 9) (Nov. 13, 2014) (unpublished).

[76] Oglala Sioux Tribe Motion to Admit Additional Testimony and Exhibits (Nov. 21, 2014).

[77] Powertech (USA), Inc. Response to the Oglala Sioux Tribe's November 21, 2014, Motion to Admit Additional Testimony and Exhibits (Dec. 4, 2014).

[78] NRC Staff's Brief in Support of Answering Testimony (Dec. 9, 2014).

exhibits should be accorded nonpublic status, and closed the evidentiary record on Contention 3.[79] The parties filed their memoranda on the nonpublic status of exhibits on December 19, 2014,[80] and the Board subsequently ruled that newly submitted supplemental testimony would be made public, while other Oglala Sioux Tribe exhibits should remain nonpublic.[81]

On January 9, 2015, the parties submitted their Proposed Findings of Fact and Conclusions of Law,[82] and on January 29, 2015, their Replies to these post-hearing filings.[83] On March 9, 2015, the Board issued a Notice that it anticipated issuing an Initial Decision no later than April 30, 2015.[84]

This Partial Initial Decision makes a determination regarding the merits of the seven contentions that were the subjects of the evidentiary hearing in August 2014, and rules on the admissibility of two additional contentions proposed by the Oglala Sioux Tribe on November 7, 2014. In addressing each of the concerns raised by the Intervenors in their contentions, this Partial Initial Decision upholds the NRC Staff issuance of Source Materials License No. SUA-1600, albeit with the imposition of additional license conditions.

III. LEGAL STANDARDS

Contentions 1A, 1B, 2, 3, 4, 6, and 9 raise challenges to the Powertech

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[79] Licensing Board Order (Admitting Additional Exhibits, Closing the Record on Contention 3 and Setting Briefing Dates) (Dec. 10, 2014) (unpublished).

[80] NRC Staff's Response to Board's December 10, 2014 Order (Dec. 19, 2014); Powertech (USA), Inc. Response to the Atomic Safety and Licensing Board's Request for Argument on Potential Non-Public Status of Oglala Sioux Tribe's Exhibits (Dec. 19, 2014); Oglala Sioux Tribe's Memorandum of Law in Response to the Board's December 9, 2014 Order in Regarding Public Disclosure of Admitted Testimony and Exhibits (Dec. 19, 2014).

[81] Licensing Board Order (Ruling on Confidentiality of Exhibits OST-029 through OST-041) (Jan. 12, 2015) (unpublished).

[82] NRC Staff's Proposed Findings of Fact and Conclusions of Law (Jan. 9, 2015); NRC Staff's Response to Post-Hearing Order (Jan. 9, 2015); Powertech (USA), Inc's Proposed Findings of Fact and Conclusions of Law (Jan. 9, 2015) [hereinafter Powertech Initial Findings of Fact and Conclusions of Law]; Consolidated Intervenors' Proposed Findings of Fact and Conclusions of Law and Response to Post-Hearing Order (Jan. 9, 2015); Oglala Sioux Tribe's Post-Hearing Initial Brief with Findings of Fact and Conclusions of Law (Jan. 9, 2015) [hereinafter Oglala Sioux Tribe Post-Hearing Initial Brief].

[83] Consolidated Intervenor's Reply to Post-Hearing Briefs (Jan. 29, 2015); NRC Staff's Reply Brief (Jan. 29, 2015) [hereinafter NRC Staff's Post-Hearing Reply Brief]; Errata to NRC Staff's Post-Hearing Briefs (Feb. 2, 2015); Powertech (USA), Inc's Reply to Proposed Findings of Fact and Conclusions of Law (Jan. 29, 2015); Oglala Sioux Tribe's Post-Hearing Reply Brief (Jan. 29, 2015) [hereinafter Oglala Sioux Tribe Post-Hearing Reply Brief].

[84] Licensing Board Notice (Regarding Expected Issuance of Initial Decision) (Mar. 9, 2015) (unpublished).

ISL license application under the Atomic Energy Act of 1954, as amended (AEA), the National Environmental Policy Act of 1969 (NEPA),[85] the National Historic Preservation Act (NHPA)[86] and the NRC regulations implementing the agency's responsibilities pursuant to these Acts.[87] Together, these statutes and the corresponding agency regulations govern an applicant's and the NRC Staff's roles in considering the safety and environmental effects of a proposed agency ISL licensing action under 10 C.F.R. Part 40. The NRC has a statutory obligation to assess each site-specific license application to ensure it complies with NRC regulations before issuing a license.

Additionally, the Council on Environmental Quality (CEQ) and the Advisory Council on Historic Preservation (ACHP) have issued regulations that provide guidance on agency compliance with NEPA[88] and the NHPA,[89] that, while not binding on the NRC when the agency has not expressly adopted them, are entitled to considerable deference.[90]

A. AEA Requirements

The AEA and the Uranium Mill Tailings Radiation Control Act of 1978[91] authorize the NRC to issue licenses for the possession and use of source material and byproduct material.[92] These statutes require the NRC to license facilities that meet NRC regulatory requirements developed to protect public health and safety from radiological hazards. To operate, ISL uranium recovery facilities must meet NRC regulatory requirements and obtain a source materials license.

The AEA also provides hearing rights in licensing actions concerning "the granting . . . of any license . . . upon the request of any person whose interest may be affected by the proceeding."[93] Given that the licensing action in dispute

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[85] 42 U.S.C. § 4321 *et seq.*

[86] 16 U.S.C. § 470 *et seq.* While the NHPA was previously codified at title 16 of the U.S. Code, effective December 19, 2014, it was moved to title 54. *See* 54 U.S.C. § 300101 *et seq.*

[87] 10 C.F.R. Part 51.

[88] *See* 40 C.F.R. Part 1500.

[89] 36 C.F.R. § 800 *et seq.*

[90] *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 725, 743 (3d Cir. 1989); *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007) (giving CEQ's regulations and guidance "substantial deference").

[91] AEA, 42 U.S.C. 2011 *et seq.*; Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S.C. §§ 2022 *et seq.*, 7901 *et seq.*

[92] Section 11e(2) byproduct material is regulated by the NRC under 10 C.F.R. Part 40. In 10 C.F.R. § 40.4, the NRC clarified the definition of byproduct material by adding the clause "including discrete surface wastes resulting from uranium solution extraction processes." In simpler terms, it is the waste and tailings generated by the processing of ore for its uranium or thorium content.

[93] AEA § 189(a)(1)(A), 42 U.S.C. § 2239a(1)(a).

here is the grant of Powertech's combined source and 11e(2) byproduct materials license, AEA hearing rights attach. ISL license applications require a safety review to determine if a license applicant has met all relevant criteria in 10 C.F.R. Parts 20 and 40. These safety requirements include certain criteria in Appendix A to Part 40, which provides specific standards for operating uranium mills and disposing of waste material. However, because the Dewey-Burdock Project is not a conventional uranium mill, not all criteria in Appendix A must be met.[94]

B. NEPA Requirements

NEPA requires that federal agencies prepare a detailed environmental impact statement for proposed actions "significantly affecting the quality of the human environment."[95] The adverse environmental effects that must be assessed under NEPA include "aesthetic, historic, cultural, economic, social, or health" effects.[96] While reviewing any adverse effects, federal agencies must take a hard look at the environmental impacts of a proposed action.[97] This hard look is intended to foster both informed agency decisionmaking and informed public participation so as to ensure that the agency does not act upon incomplete information.[98] The NRC Staff must provide "a reasonably thorough discussion of the significant aspects of the probable environmental consequences."[99] However, the hard look is subject to a "rule of reason," and consideration of environmental impacts need not address all theoretical possibilities, but only those that have some reasonable possibility

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[94] *See Hydro Resources, Inc.* (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-99-22, 50 NRC 3, 9 (1999) ("We agree that those requirements in Part 40, such as many of the provisions in Appendix A, that, by their own terms, apply only to conventional uranium milling activities, cannot sensibly govern ISL mining.").

[95] 42 U.S.C. § 4332(2)(C).

[96] 40 C.F.R. § 1508.8(b) (2014).

[97] *See Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998).

[98] The NEPA hard look must emerge from an engagement in informed and reasoned decisionmaking, as the agency "obtains opinions from its own experts, obtains opinions from experts outside the agency, gives careful scientific scrutiny and responds to all legitimate concerns that are raised." *Hughes River Watershed Conservancy v. Johnson*, 165 F.3d 283, 288 (4th Cir. 1999) (citing *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 378-85 (1989)).

[99] *Trout Unlimited v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974); *Warm Springs Dam Task Force v. Gribble*, 621 F.2d 1017, 1026-27 (9th Cir. 1980); *see also Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005) ("NEPA also does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts." (emphasis in original)).

of occurring.[100] As the Commission has emphasized, "an environmental impact statement is not intended to be 'a research document.'"[101]

In an NRC adjudicatory proceeding, even if a Board finds an Environmental Impact Statement (EIS) prepared by the NRC Staff inadequate in certain respects, the Board's findings, as well as the adjudicatory record, "become, in effect, part of the [final EIS]."[102] Thus, the Board's ultimate NEPA judgments are made on the basis of the entire adjudicatory record in addition to the NRC Staff's FSEIS.[103] In this proceeding, the NRC Staff issued the license after it issued the FSEIS, but before the evidentiary hearing.[104]

C. NHPA Requirements

The NHPA, like NEPA, is a procedural statute requiring government agencies to "stop, look, and listen" before proceeding with agency action.[105] Under the

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[100] *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973); *see also Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 807 (2005); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 7 (2002). The NRC Staff must have some discretion to draw the line and move forward with decisionmaking. *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (2010) (citation omitted).

[101] *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 208 (2010) (citation omitted). NEPA does not require the NRC Staff to analyze every conceivable aspect of the proposed project. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

[102] *Claiborne*, CLI-98-3, 47 NRC at 89.

[103] *See Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385, 404 (2005), *aff'd*, CLI-06-22, 64 NRC 37 (2006); *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 733 (2009), *petition for review denied*, CLI-10-5, 71 NRC 90 (2010).

[104] Section 2.1202(a) of 10 C.F.R. instructs the NRC Staff "to promptly issue its approval or denial of the application" consistent with its findings, despite the pendency of a hearing. Nonetheless, the issued license can be revoked, conditioned, modified, or affirmed based on the evidence reviewed at the evidentiary hearing. *See* 10 C.F.R. § 40.41(e)(2) ("The Commission may incorporate in any license at the time of issuance, or thereafter, by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use, and transfer of source or byproduct material as it deems appropriate or necessary in order to . . . protect health or to minimize danger of life or property."); *see also Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 68 (1977) (quoting CLI-77-8, 5 NRC 503, 530 (1977) ("In granting a proposed license, the Board may condition it upon some precautionary measures required at the chosen site.").

[105] Ex. NRC-048, Council on Environmental Quality, Executive Office of the President, and Advisory Council on Historic Preservation, NEPA and NHPA: A Handbook for Integrating NEPA and Section 106 at 4 (Mar. 2013) [hereinafter NEPA and NHPA Handbook, Ex. NRC-048]; *see also* 16 U.S.C. § 470 *et seq.*

NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties,[106] determine whether identified properties are eligible for listing on the National Register based on the criteria in 36 C.F.R. § 60.4, assess the effects of the undertaking on any eligible historic properties found,[107] determine whether the effect will be adverse,[108] and avoid or mitigate any adverse effects.[109] The federal agency must confer with a State Historic Preservation Officer and seek the approval of the ACHP.[110]

Section 106 of the NHPA requires federal agencies, prior to approving any "undertaking," such as the Dewey-Burdock project, to "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register."[111] If an undertaking "may affect" an eligible site, the agency must make a reasonable and good faith effort to seek information from consulting parties, other members of the public, and Native American tribes to identify historic properties in the area of potential effect. The NHPA also requires that federal agencies "consult with any Indian tribe . . . that attaches religious and cultural significance" to the sites.[112] Consultation must provide the tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects."[113] The NHPA further requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government and Indian tribes."[114]

Agencies are directed by presidential memoranda and Executive Orders to undertake meaningful consultation with Indian tribes. In 1994, President Clinton called for agencies "to ensure that the Federal Government operates within a government-to-government relationship with federally recognized Native American tribes[,] . . . reflecting respect for the rights of self-government due the

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[106] 36 C.F.R. § 800.4(b).

[107] 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a).

[108] 36 C.F.R. §§ 800.5(c), 800.9(b).

[109] 36 C.F.R. §§ 800.8(c), 800.9(c).

[110] *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 805 (9th Cir. 1999); *see also* 36 C.F.R. § 800.8(c)(1)(v) (An agency must "develop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the [environmental assessment] EA or DEIS.").

[111] 16 U.S.C. § 470f.

[112] 16 U.S.C. § 470a(d)(6)(B).

[113] 36 C.F.R. § 800.2(c)(2)(ii)(A).

[114] 36 C.F.R. § 800.2(c)(2)(ii)(C).

sovereign tribal governments."[115] In 2000, President Clinton issued an Executive Order "to establish regular and meaningful consultation and collaboration with tribal officials" through "an accountable process" at each agency.[116] In 2009, President Obama issued a memorandum commenting that a lack of consultation with tribes "has all too often led to undesirable and, at times, devastating and tragic results," but that "meaningful dialogue between Federal officials and tribal officials has greatly improved Federal policy toward Indian tribes."[117]

An agency may fulfill its NHPA review responsibilities through several means, one of which includes the issuance of a Programmatic Agreement. A Programmatic Agreement may be used to implement the Section 106 process in situations where the effects to historic properties cannot be fully determined prior to the approval of an undertaking, such as where an applicant proposes a phased approach to developing its project.[118] In such cases, the Programmatic Agreement establishes a phased process for consultation, review, and compliance with the NHPA.

The ACHP guidance on consultation reiterates that consultation must begin at the earliest possible time in an agency's consideration of an undertaking, framing such early engagement with Indian tribes as an issue of respect for tribal sovereignty.[119] Agencies must ensure that a tribe has "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, . . . articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects."[120] Federal policy, as reflected in the American Indian Religious Freedom Act of

[115] Memorandum on Government-to-Government Relations with Native American Tribal Governments, 30 Weekly Comp. Pres. Doc. 936 (May 2, 1994).

[116] Exec. Order No. 13,175, 65 Fed. Reg. 67,249, 67,250 (Nov. 6, 2000). Independent regulatory agencies, including the NRC, were "encouraged to comply with the provisions of this order." *Id.* at 67,251. The NRC has created a Tribal Protocol Manual, and stated that it would act in a manner consistent with the fundamental precepts expressed in the Executive Order. Division of Material, Safety, States, Tribal, and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards, Tribal Protocol Manual, NUREG-2173, at 4 (Dec. 2014) (ADAMS Accession No. ML14274A014) [hereinafter Tribal Protocol Manual].

[117] Memorandum on Tribal Consultation, 74 Fed. Reg. 57,881 (Nov. 5, 2009).

[118] 36 C.F.R. §§ 800.13, 800.14(b)(1).

[119] Advisory Council on Historic Preservation, Consultation with Indian Tribes in the Section 106 Review Process: A Handbook, at 3, 7, 12, 29 (Nov. 2008).

[120] 36 C.F.R. § 800.2(c)(2)(ii)(A).

1978[121] and the 1996 Executive Order on Indian Sacred Sites[122] also supports special consideration where tribal religious exercise is threatened.

D. NRC Regulations

The NRC's environmental protection regulations, which implement NEPA, are found in Title 10, Part 51 of the *Code of Federal Regulations.* Issuance of a license to possess and use source material for uranium milling and ISL mining requires an EIS or a supplement to an EIS, and the NRC has prepared a Generic Environmental Impact Statement (GElS) for ISL mining, NUREG-1910, to help fulfill this requirement.[123] The GElS assesses the potential environmental impacts associated with the construction, operation, aquifer restoration, and decommissioning of an ISL uranium recovery facility in four specified regions in the western United States. The intent of the GElS is to determine which impacts would be essentially the same for all ISL facilities and which ones would result in varying levels of impacts for different facilities, thus requiring further site-specific information to determine the potential impacts. As such, the GElS provides a starting point for the NRC's NEPA analyses for site-specific license applications for new ISL facilities, as well as for applications to amend or renew existing ISL licenses.

E. Burden of Proof

As the proponent of the agency action, an applicant generally has the burden of proof in a licensing proceeding.[124] The statutory obligation of complying with NEPA, however, rests with the NRC.[125] Consequently, when NEPA contentions are involved, the burden shifts to the NRC Staff.[126] Nonetheless, because "the

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[121] American Indian Religious Freedom Act, Pub. L. No. 95-341, 92 Stat. 469 (1978) (codified at 42 U.S.C. § 1996 (2012)).

[122] Exec. Order No. 13,007, 61 Fed. Reg. 26,771 (May 24, 1996), *reprinted in* 42 U.S.C. § 1996 (2012).

[123] Issuing a license to possess and use source material to a uranium milling facility is identified as a major federal action. 10 C.F.R. § 51.20(b)(8); *see also* Ex. NRC-010-A-1 through NRC-010-B-2, Office of Federal and State Materials and Environmental Management Programs, Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, NUREG-1910 (May 2009).

[124] *See* 10 C.F.R. § 2.325.

[125] *See, e.g., Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983).

[126] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010); *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP

(Continued)

Staff, as a practical matter, relies heavily upon the Applicant's Environmental Report in preparing the EIS, should the Applicant become a proponent of a particular challenged position set forth in the EIS, the Applicant, as such a proponent, also has the burden on that matter."[127] And relative to factual matters, to carry that burden, the NRC Staff and/or Powertech[128] must establish that its position is supported by a preponderance of the evidence.[129]

IV. DISCUSSION

Contentions 1A and 1B challenge the adequacy of the NRC Staff's FSEIS discussion of the protection of Native American religious and cultural resources.[130] In Contention 1A, the Intervenors allege that the NRC Staff's FSEIS does not adequately address the environmental effects of the Dewey-Burdock project on Native American cultural, religious, and historic resources. In Contention 1B the Oglala Sioux Tribe challenges the consultation process employed, and alleges the NRC Staff failed to fulfill its responsibilities regarding consultation with Native American tribes.

Contentions 2, 3, and 4 question the adequacy of the FSEIS analysis of baseline groundwater quality (Contention 2), the potential for fluid migration and its impact on groundwater quality (Contention 3), as well as a failure to adequately analyze groundwater quantity impacts (Contention 4).

Contentions 6 and 9 allege an inadequate description and analysis of mitigation measures (Contention 6) and a failure to consider connected actions in the FSEIS (Contention 9).

A. Contentions 1A and 1B: Historical and Cultural Resources and Consultation

Based on the intertwined nature of Contentions 1A and 1B, the Board will

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Site), CLI-07-17, 65 NRC 392, 395 (2007) (stating that "NRC hearings on NEPA issues focus entirely on the adequacy of the NRC Staff's work").

[127] *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 339 (1996) (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-471, 7 NRC 477, 489 n.8 (1978)), *rev'd on other grounds*, CLI-97-15, 46 NRC 294 (1997).

[128] On April 8, 2014, the NRC Staff issued NRC Source Materials License No. SUA-1600 to Powertech (USA), Inc. pursuant to 10 C.F.R. § 2.1202(a).

[129] *See Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-763, 19 NRC 571, 577 & n.22 (1984).

[130] Originally, this contention challenged the discussion of this subject in Powertech's ER. However, with the release of the NRC Staff's NEPA documents, the contention subsequently migrated into a challenge of the discussion of this subject in the NRC Staff's FSEIS.

consider these contentions jointly. For Contentions 1A and 1B at the evidentiary hearing, the Oglala Sioux Tribe offered witnesses Wilmer Mesteth[131] and Michael CatchesEnemy.[132] Consolidated Intervenors offered witness Louis Redmond.[133] Powertech offered witnesses Lynn Sebastian,[134] Adrien Hannus,[135] and Michael Fosha.[136] The NRC Staff offered witnesses Haimanot Yilma,[137] Kellee Jamerson,[138] Po-Wen (Kevin) Hsueh,[139] and Hope Luhman.[140]

1. Contention 1A: Failure to Meet Applicable Legal Requirements Regarding Protection of Historical and Cultural Resources

Contention 1A was originally submitted as part of the Oglala Sioux Tribe's Contention 1 and Consolidated Intervenors' Contention K.[141] The current form of Contention 1A challenges the NRC Staff's FSEIS.[142]

2. Contention 1B: Failure to Involve or Consult All Interested Tribes as Required by Federal Law

The Board first addressed the adequacy of the consultation process in 2010, when the Board held, in LBP-10-16, that "the issue of the alleged failure to consult with the Tribe . . . is material and within the scope of this proceeding."[143] The Board found, however, that "the failure to consult" portion of the contention

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[131] Ex. OST-015, Declaration of Wilmer Mesteth (Apr. 1, 2010).

[132] Ex. OST-014, Declaration of Michael CatchesEnemy (Apr. 14, 2014).

[133] Ex. INT-003, Louis Redmond Curriculum Vitae.

[134] Ex. APP-002, Lynne Sebastian Curriculum Vitae.

[135] Ex. APP-004, L. Adrien Hannus Curriculum Vitae.

[136] Ex. APP-011, Michael R. Fosha Curriculum Vitae.

[137] Ex. NRC-003-R, Revised Statement of Professional Qualifications of Haimanot Yilma.

[138] Ex. NRC-004-R, Revised Statement of Professional Qualifications of Kellee L. Jamerson.

[139] Ex. NRC-002-R, Revised Statement of Professional Qualifications of Po-Wen (Kevin) Hsueh.

[140] Ex. NRC-152, Statement of Professional Qualifications of Hope E. Luhman.

[141] Contention 1, as filed, read in full, "Failure to meet applicable legal requirements regarding protection of historical and cultural resources, and failure to involve or consult the Oglala Sioux Tribe as required by Federal law." Oglala Sioux Tribe Petition, Ex. OST-010 at 12; Consolidated Intervenors' New Petition at 1-2. Contention K read, "The Application is not in conformance with 10 C.F.R. § 40.9 and 10 C.F.R. § 51.45 because the Application does not provide analyses that are adequate, accurate, and complete in all material respects to demonstrate that cultural and historic resources . . . are identified and protected pursuant to Section 106 of the National Historic Preservation Act. As a result, the Application fails to comply with Section 51.60." Consolidated Intervenors' Petition, Ex. INT-016 at 1-2.

[142] LBP-14-5, 79 NRC at 401.

[143] LBP-10-16, 72 NRC at 422; *see also Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 350-51 (2009) (discussing the licensing board's ruling that tribal consultation is within the scope of the proceeding).

was not yet ripe and directed the Oglala Sioux Tribe to "wait until the [DSEIS] is issued by the NRC Staff to interpose the issue of the adequacy of the agency's consultation efforts."[144] The "failure to consult" contention was re-raised by the Oglala Sioux Tribe in response to the DSEIS, and admitted by the Board.[145] Thereafter, in LBP-14-5 the Board held that the contention migrated as a criticism of the FSEIS.[146]

3. Summary of Consultation Efforts and Cultural Surveys

The disposition of Contentions 1A and 1B largely flows from the specific steps taken throughout the consultation process. With this in mind, the Board begins by laying out the details of consultation efforts and tribal cultural surveys pursued during the NEPA process for the Dewey-Burdock project as described in the FSEIS.[147]

At the outset, the FSEIS notes that "the proposed action has the potential to affect certain sites of religious and cultural significance to Native American tribes; however, the impacts to such sites are expected to be reduced through mitigation strategies developed through the National Historic Preservation Act Section 106 consultation process."[148] Beginning in 2010 the NRC Staff began its efforts to address cultural, religious, and historical Native American sites. The South Dakota State Historic Preservation Officer initially identified twenty Native American tribes that might attach historic, cultural, and religious significance to historic properties within the proposed Dewey-Burdock ISL Project area.[149] The NRC Staff contacted these twenty tribal governments by letters dated March 19, 2010, September 10, 2010, and March 4, 2011.[150] The NRC Staff invited the tribes to participate as consulting parties in the NHPA § 106 process and requested assistance in identifying tribal historic sites or cultural resources that might be affected by the proposed action.

By letter dated January 31, 2011, the Oglala Sioux Tribe Tribal Historic

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[144] LBP-10-16, 72 NRC at 422.

[145] LBP-13-9, 78 NRC at 113.

[146] LBP-14-5, 79 NRC at 401.

[147] FSEIS, Ex. NRC-008-A-1, § 1.7.3.5.

[148] FSEIS, Ex. NRC-008-A-1, Executive Summary at xliv. Quoting an earlier study of the area, the FSEIS states, "most of the tribal members interviewed knew their people had regular ceremonial, cultural, and religious activity in the Black Hills prior to the establishment of reservations; however, no one could pinpoint present cultural, ceremonial, or religious use in the proposed area (Sprague, 2008, p. 14)." *Id.* § 1.7.3.1.

[149] The Cheyenne and Arapaho, Pawnee, and Omaha tribes were contacted later in February 2013. FSEIS, Ex. NRC-008-A-1, § 1.7.3.5.

[150] *Id.*

Preservation Officer accepted the invitation to participate as a consulting party and stated that the proposed Dewey-Burdock Project represented a substantial potential threat to the preservation of cultural and historic resources of the Oglala Sioux Tribe.[151] The Oglala Sioux Tribal Historic Preservation Officer also declared that the proposed project site was located within an area about which various Sioux tribes, along with the Cheyenne, Arapahoe, Crow, and Arikara Tribes, possess intimate cultural knowledge.[152] The Tribal Historic Preservation Officer further stated that impacts that could result from the proposed project include not only site-specific physical impacts, but intangible impacts to the integrity of the area from cultural, historical, spiritual, and religious perspectives.[153]

The NRC Staff held an "informal information gathering meeting" on June 8, 2011, at the Prairie Winds Casino and Hotel on the Pine Ridge Reservation with representatives of six tribes.[154] At that meeting tribal officials expressed concerns about the identification and preservation of historic properties of traditional religious and cultural importance to tribes at the proposed Dewey-Burdock site and two Crow Butte ISL sites in Nebraska. Tribal officials stated that historic and cultural resource studies of the sites should be conducted with tribal involvement.[155] In conjunction with the June 8, 2011, informal information gathering meeting, Powertech hosted a visit to the project site on June 9, 2011.

The NRC Staff held a second meeting with representatives of thirteen Native American tribes[156] in Rapid City, South Dakota, on February 14-15, 2012. The purpose of this meeting was to solicit the views of interested tribes about the general types and descriptions of historic properties of religious and cultural significance that may be affected by the proposed project and how these properties could be identified and evaluated as part of the ongoing consultations under section 106 of the NHPA.[157] Tribal representatives requested another face-to-face meeting to review draft statements of work prepared by several tribes and applicants.[158] Although a followup meeting was scheduled for March 14-15, 2012, it was

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[151] *Id.*

[152] *Id.*

[153] *Id.*

[154] The tribes with representatives in attendance were: the Oglala Sioux, Standing Rock Sioux, Flandreau-Santee Sioux, Sisseton-Wahpeton Oyate, Cheyenne River Sioux, and Rosebud Sioux. *Id.*

[155] *Id.*

[156] The tribes in attendance were: Cheyenne River Sioux, Crow Creek Sioux, Crow Tribe of Montana, Eastern Shoshone, Fort Peak Assiniboine Sioux, Northern Arapaho, Northern Cheyenne, Oglala Sioux, Rosebud Sioux, Yankton Sioux, Sisseton-Wahpeton Sioux, Santee Sioux Nation, and Standing Rock Sioux. *See id.*

[157] *Id.*

[158] These statements of work were for the preparation of traditional cultural properties for three proposed ISL projects in the greater Black Hills area; Dewey-Burdock ISR, Crow Butte License Renewal ISR in Nebraska, and the Crow Butte North Trend expansion area.

subsequently canceled. In lieu of this face-to-face meeting, the NRC Staff instead held a series of telephone conference calls and an exchange of letters and e-mails.[159]

On September 5, 2012, the NRC Staff met with representatives of seven tribes in Bismarck, North Dakota.[160] During this meeting, participants discussed how to proceed with the development of a statement of work to identify religious and cultural properties within the area of potential effects. All parties agreed a survey was necessary for historic property identification. All parties also agreed further consultation was needed to develop a statement of work that focused survey efforts on the identification of properties directly and indirectly affected by the proposed project.[161] Following this meeting, the NRC Staff asked participants from the September 5, 2012 meeting in Bismarck, North Dakota, to designate a preferred contractor to submit a proposal to conduct a survey on their behalf. The NRC Staff requested that the contractor's proposal be based on the area of direct effect that might be disturbed during the initial phase of the Dewey-Burdock ISL Project, and that the proposal include a cost estimate.[162] The NRC Staff also indicated a Programmatic Agreement would need to be "developed to address the phased identification and evaluation of historic properties."[163]

On June 19, 2012, the tribes provided the NRC Staff with a preliminary tribal statement of work for identifying properties of religious and cultural significance at the Dewey-Burdock ISL Project site. On September 27, 2012, the NRC Staff received a proposal and cost estimate from the tribes for a traditional cultural properties survey for the proposed Dewey-Burdock Project. The proposal and cost estimate were prepared by Makoche Wowapi/Mentz-Wilson Consultants, LLP, the contractor selected by the tribes to complete the cultural resources survey of the proposed project. On October 12, 2012, the NRC Staff informed the tribes of the significant differences between the Makoche Wowapi/Mentz-Wilson Consultants, LLP proposal and Powertech's proposal. The NRC Staff requested that the tribes propose alternative methods for identifying potential properties of traditional religious and cultural importance to the tribes. The NRC Staff suggested that alternative methods might include opening the site to interested tribal specialists over a period of several weeks with payment for survey costs

[159] FSEIS, Ex. NRC-008-A-1, § 1.7.3.5.

[160] Representatives of the Yankton Sioux, Sisseton-Wahpeton Oyate Sioux, Rosebud Sioux, Standing Rock Sioux, Northern Cheyenne, Oglala Sioux, and Crow Nation attended this meeting. *Id.*

[161] *Id.*

[162] *Id.*

[163] DSEIS, Ex. NRC-009-B-2, App. A at A-298, Request for Proposal, Letter from Kevin Hsueh, NRC Branch Chief, to Tribal Historic Preservation Officer (Sept. 18, 2012).

made to individual tribes or seeking ethno-historic and ethnographic information from tribal specialists in interviews at tribal headquarters.[164]

Between October 15 and October 20, 2012, the NRC Staff received letters and e-mails from four tribes opposing the NRC Staff's request for alternative survey approaches.[165] These tribes maintained that the only level of effort sufficient for identifying historic properties would be an on-the-ground, 100% survey of the entire license boundary by tribal personnel from participating tribes.[166] On October 19, 2012, the NRC Staff received an alternative field survey proposal from four tribes (not including the Oglala Sioux Tribe) in collaboration with Kadramas, Lee, & Jackson (KLJ), a private consulting firm from North Dakota. This alternative field survey proposed investigation of previously recorded archaeological sites, use of light detection and ranging mapping technology to locate potential rock alignments, cairns, and other stone features, and a systematic pedestrian survey of the 2637 acres of the project.[167] The NRC Staff found that the proposed level of effort in the KLJ proposal was reasonable and appropriate to the project area and that the estimated costs were in line with the range of survey costs obtained in tribal surveys of other projects. On October 31, 2012, the NRC Staff endorsed the KLJ survey approach and invited all consulting tribes to participate in the survey with paid compensation for one representative per tribe. However, five tribes (including the Oglala Sioux Tribe) opposed the KLJ proposal.[168] KLJ subsequently withdrew its proposal.[169]

The NRC Staff issued the DSEIS in November 2012, stating that it was using the NEPA process to satisfy the public participation requirements of the NHPA.[170] The guidance in the NHPA Handbook, admitted into evidence as an NRC Staff exhibit, notes that the term "cultural resources" covers a wider range of resources than just "historic properties," and includes "sacred sites, archaeological sites not eligible for the National Register of Historic Places,

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[164] *Id.* at 81.

[165] The four tribes were the Standing Rock Sioux Tribe, the Sisseton-Wahpeton Oyate, the Rosebud Sioux Tribe, and the Yankton Sioux Tribe. FSEIS, Ex. NRC-008-A-1, § 1.7.3.5.

[166] *Id.* The entire license boundary of the proposed Dewey-Burdock ISL project encompasses 10,580 acres. FSEIS, Ex. NRC-008-A-2 § 4.12.2.

[167] FSEIS, Ex. NRC-008-A-1, § 1.7.3.5. These 2637 acres represent the area of immediate direct effects. FSEIS, Ex. NRC-008-B-2, § E5.11.

[168] FSEIS, Ex. NRC-008-A-1, § 1.7.3.5. The other tribes that opposed this proposal were the Standing Rock Sioux Tribe, Rosebud Sioux Tribe, Sisseton-Wahpeton Oyate, and Yankton Sioux Tribe.

[169] *Id.*

[170] This approach, referred to as "substitution," is permitted under NHPA regulations. 36 C.F.R. § 800.8; *see also* NEPA and NHPA Handbook, Ex. NRC-048 at 29-33 (describing the substitution process).

and archaeological collections."[171] The NRC Staff explained that, consistent with this broader approach, after completion of the DSEIS it continued "working to facilitate a field survey of the Dewey-Burdock site in order to obtain additional information on historic properties. When the survey is complete, the Staff will supplement its analysis in the DSEIS and circulate the new analysis for public comment."[172]

In December 2012 the NRC Staff invited all interested consulting parties to provide information relevant to the development of a Programmatic Agreement.[173] The NRC Staff also stated that it intended to move forward with an alternative field survey approach in the spring of 2013.[174]

On February 8, 2013, the NRC Staff invited twenty-three tribes[175] to participate in a field survey between April 1 and May 1, 2013, and described procedures for site access, and compensation for survey participation. Tribes interested in participating in the field survey were advised to respond by March 12, 2013. On March 22, 2013, the Oglala Sioux Tribe objected to the terms of the survey proposal and indicated that the proposed April 1, 2013 date for the start of the field survey did not allow sufficient time for formal authorization from its Tribal Council and constituents. The Oglala Sioux Tribe expressed concern that (1) the scope of the work methodology was inadequate, (2) the funds allocated for the survey were insufficient, (3) the NRC Staff lacked cultural sensitivity on these issues, and (4) the NRC Staff was not fully addressing the direct and indirect effects on cultural resources and burial grounds, and the protection of intellectual property generated during the survey. The Oglala Sioux Tribe declared that the existing NHPA § 106 consultation did not satisfy the required formal government-to-government consultation.[176]

Despite these objections from the Oglala Sioux Tribe, the field survey of the Dewey-Burdock site began on April 1, 2013, with three tribes subsequently

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[171] NEPA and NHPA Handbook, Ex. NRC-048, at 4.

[172] NRC Staff's Answer to Contentions on the [DSEIS] (Mar. 7, 2013) at 13 (citation omitted).

[173] The prospect of a post-FSEIS Programmatic Agreement was raised during a series of teleconferences held in August 2012 and correspondence in September 2012. DSEIS, NRC-009-B-2, App. A at A-86, Proposed Agenda, E-mail from Haimanot Yilma, NRC, to Tribal Historic Preservation Officers (Aug. 20, 2012).

[174] *Id.*

[175] The original twenty tribes were invited, as well as the Cheyenne and Arapaho, Pawnee, and Omaha Tribes.

[176] FSEIS, Ex. NRC-008-A-1, § 1.7.3.5. On May 23, 2013, the NRC Staff hosted a meeting in Rapid City, South Dakota, concerning licensing actions associated with three proposed uranium recovery projects under NRC licensing review. The NRC Staff invited over thirty tribes currently in consultation on uranium recovery projects to this meeting with NRC management. *Id.*

submitting survey reports to the NRC Staff for inclusion in the FSEIS.[177] The survey reports documented sites of religious and cultural significance identified during site surveys, and included National Register of Historic Places eligibility recommendations as well as mitigation measures recommended for each identified site.

The NRC Staff later officially separated its NHPA § 106 activities from its NEPA review, informing the tribes and the ACHP of this by letter dated November 6, 2013.[178] By separating the NHPA § 106 process from the NEPA review the NRC Staff determined that a phased process for compliance with section 106 was appropriate. From this point, the NRC Staff's evaluation and determinations of effects on historic properties and consultation concerning measures needed to avoid, minimize, or mitigate any adverse effects was carried out in phases, as set forth in the Programmatic Agreement.[179] In January 2014 the NRC Staff issued the FSEIS. The FSEIS contained the results of the field survey, which consisted of the three reports by Native American tribes with National Register of Historic Places eligibility recommendations.[180] The NRC Staff continued to consult with the Bureau of Land Management (BLM), the South Dakota State Historic Preservation Officer, and the tribes on issues arising under section 106 of the NHPA, and finalized the Programmatic Agreement on April 7, 2014.[181] The ACHP noted that a consensus was not reached with the tribes relative to the Programmatic Agreement, but that the Programmatic Agreement was to incorporate "a path forward to continue working with consulting tribes to conclude the identification and evaluation process."[182]

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[177] The Cheyenne and Arapaho, Northern Arapaho, and Northern Cheyenne tribes submitted survey reports to the NRC. The NRC Staff also received field notes from the Crow Tribe, although the Crow Tribe field notes did not contain NHPA eligibility recommendations.

[178] Ex. NRC-015, Project Summary of Tribal Outreach Timeline at 15 (Apr. 8, 2014) [hereinafter Tribal Outreach Timeline, NRC-015]; *see also* FSEIS, NRC-008-B-2, App. A, at A-161-66.

[179] Ex. NRC-018-A, Programmatic Agreement Among U.S. Nuclear Regulatory Commission, U.S. Bureau of Land Management, South Dakota State Historic Preservation Office, Powertech (USA), Inc., and Advisory Council on Historic Preservation Regarding the Dewey-Burdock In Situ Recovery Project Located in Custer and Fall River Counties South Dakota at 2 (Mar. 19, 2014) [hereinafter Programmatic Agreement, Ex. NRC-018-A].

[180] Ex. NRC-019, Summary Report Regarding the Tribal Cultural Surveys Completed for the Dewey-Burdock Uranium In-Situ Recovery Project at 1-2 (Dec. 16, 2013) [hereinafter Report on Tribal Cultural Surveys, NRC-019]. Seven tribes participated in the field survey and three tribes (Northern Arapaho Tribe, Northern Cheyenne Tribe, Cheyenne and Arapaho Tribes of Oklahoma) submitted written reports. The Crow Nation provided the NRC Staff with a copy of field notes identifying several sites of interest to that tribe.

[181] Ex. NRC-018-D, Letter from Reid Nelson, Director, Office of Federal Agency Programs, Advisory Council on Historic Preservation, to Kevin Hsueh, Chief, Environmental Review Branch, NRC, at 1 (Apr. 7, 2014) (finalizing section 106 review).

[182] *Id.*

4. Legal Standards

Under NEPA regulations, defining the scope of effects of a project requires engagement with the governments of affected tribes through an "early and open process," aimed at identifying concerns, potential impacts, relevant effects of past actions, and possible alternative actions.[183] The Commission's regulations in 10 C.F.R. § 51.71(b) require the NRC Staff to include in the FSEIS "an analysis of significant problems and objections raised by . . . any affected Indian tribes, and by other interested persons." The GEIS in this case determined the impacts for all ISL facilities in the region, but the FSEIS for each project must contain the site-specific information to determine potential impacts of a particular project.

5. Parties' Positions

In Contention 1A, Intervenors assert that the NRC Staff failed to adequately analyze cultural and historic resources under NEPA before the license was issued, and that the FSEIS and other environmental documents[184] contain insufficient analysis of cultural impacts. Specifically, Intervenors allege that while 10 C.F.R. §§ 51.71(d), 51.45(b) and NEPA require the FSEIS to include an analysis of cultural impacts, "neither [the applicant nor the NRC Staff] has conducted an adequate and competent cultural resources survey, impacts analysis, or mitigation review."[185]

The Oglala Sioux Tribe contends that because the Augustana College Level III archaeological survey[186] performed at the behest of Powertech, and referenced in the FSEIS, left a significant number of archaeological, historical, and traditional cultural resources on the site unevaluated, the potential impacts to these resources have not been addressed.[187] As a result, the Oglala Sioux Tribe objects "that no

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[183] 40 C.F.R. § 1501.7.

[184] An "environmental document" includes the documents specified in 40 C.F.R. § 1508.9 (environmental assessment), § 1508.11 (environmental impact statement), § 1508.13 (finding of no significant impact), and § 1508.22 (notice of intent). 40 C.F.R. § 1508.10.

[185] Oglala Sioux Tribe Post-Hearing Initial Brief at 13.

[186] Ex. APP-009, A Level III Cultural Resources Evaluation of Powertech (USA) Incorporated's Proposed Dewey-Burdock Uranium Project Locality Within the Southern Black Hills, Custer and Fall River Counties, South Dakota, Archeology Laboratory, Augustana College (Mar. 2008) [hereinafter Level III Cultural Resources Evaluation, Ex. APP-009].

[187] Oglala Sioux Tribe Post-Hearing Initial Brief at 13. Citing CEQ's NEPA regulations which state that "effects and impacts as used in these regulations are synonymous, the Oglala Sioux Tribe further notes that the regulations specifically require that the 'effects' that must be reviewed in a NEPA document include 'ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.'" Oglala Sioux Tribe Post-Hearing Reply Brief at 5-6 (quoting 40 C.F.R. § 1508.8).

NEPA environmental document contains a scientifically-defensible protocol and methodology for analysis of cultural resources."[188] The Oglala Sioux Tribe further contends that the FSEIS does not address cultural resources specific to the Sioux tribes, that the identification efforts were inadequate and that the NHPA measures in the Programmatic Agreement are insufficient to meet the NEPA requirements to review impacts on Native American historic, religious, and cultural resources.

The Oglala Sioux Tribe further argues that the NHPA requires federal agencies to "consult with any Indian tribe . . . that attaches religious and cultural significance" to potentially impacted historic properties.[189] They contend the NRC Staff failed to comply with NHPA regulations to conduct government-to-government consultation "in a manner sensitive to the concerns and needs of the Indian tribe."[190] Consultation, they argue, encompasses providing the Oglala Sioux Tribe "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects."[191] The Oglala Sioux Tribe contends that conversations with the NRC Staff have been neither meaningful nor reasonable because the NRC Staff has refused to work through the problems identified by the Oglala Sioux Tribe and its representatives. The Oglala Sioux Tribe (as well as several other Sioux Tribes) objected to the NRC Staff's approach to date, arguing that the tribal field surveys conducted did not address their cultural, historic, and religious concerns.[192] Specifically, the Oglala Sioux Tribe argues that of the twenty-three consulting tribes, only four participated in the field survey process and none were Sioux.[193]

The NRC Staff, on the other hand, represents to the Board that it complied with both NEPA and the NHPA and that it made "a reasonable and good faith effort — an effort that lasted almost 4 years — to obtain information on religious and cultural resources that are significant to the tribes."[194] The NRC Staff states that it "followed the joint guidance of the CEQ and the ACHP, the agencies charged with implementing NEPA and the NHPA, and the ACHP specifically

[188] Oglala Sioux Tribe Post-Hearing Initial Brief at 14.

[189] 16 U.S.C. § 470(a)(d)(6)(B).

[190] 36 C.F.R. § 800.2(c)(2)(ii)(C).

[191] 36 C.F.R. § 800.2(c)(2)(ii)(A).

[192] Oglala Sioux Tribe Statement of Position at 17.

[193] The four tribes were the Northern Arapaho (Wyoming), Northern Cheyenne (Montana), and Cheyenne and Arapaho of Oklahoma. Ex. NRC-018-B, Final Programmatic Agreement for Powertech (USA) Inc. Dewey-Burdock Project, Appendix A at 14 [hereinafter Programmatic Agreement Appendix, Ex. NRC-018-B].

[194] NRC Staff's Post-Hearing Reply Brief at 5.

approved of the Staff's NHPA review."[195] As part of its "reasonable and good faith effort" the NRC Staff explains that it initially invited twenty tribes, including the Oglala Sioux Tribe, to participate in identification efforts and provided all interested tribes a reasonable opportunity to identify historic properties, advise on the identification and evaluation of such properties, comment on the undertaking, and participate in resolving potential adverse effects.[196] The NRC Staff contends that it conducted a comprehensive review of cultural, archeological, and tribal resources at the Dewey-Burdock site and that the Oglala Sioux Tribe had the same opportunity to participate in each phase of the NRC Staff's review as all consulting tribes.

The NRC Staff defends its FSEIS analysis by stating that it first took appropriate steps to identify cultural resources that may be affected by the project, and then responded to input from consulting tribes by facilitating field surveys of the Dewey-Burdock site so that tribes could identify any traditional cultural properties.[197] The NRC Staff also states that since initiating consultation in March 2010, it has held three face-to-face meetings, conducted three teleconferences, and exchanged many e-mails, letters, and telephone calls with tribal representatives. In addition, in April and May 2013, representatives from seven of the invited tribes conducted field surveys of the Dewey-Burdock site.[198] The NRC Staff concludes that it complied with NEPA by making repeated attempts to obtain information on cultural resources and by including mitigation measures in the Programmatic Agreement that will limit impacts to any unidentified resources.[199]

Powertech, which paid the costs of the various cultural surveys, argues that the Augustana College Level III archeological survey satisfied all applicable regulatory guidelines and that the tribal field surveys, held in April and May 2013, allowed each tribe to evaluate the entire project area in a manner culturally appropriate for each tribe. Powertech also argues that the NRC Staff appropriately evaluated archeological and tribal survey results as required by NEPA and the NHPA,[200] and that a phased approach to comply with the NHPA is allowed under federal regulations. Powertech asserts that the NRC Staff has met the applicable statutes' requirements, and that all tribes, including the Oglala Sioux Tribe, were

[195] *Id.*

[196] *Id.* at 7.

[197] Programmatic Agreement Appendix, Ex. NRC-018-B, at 16-21.

[198] Report on Tribal Cultural Surveys, Ex. NRC-019.

[199] Programmatic Agreement Appendix, Ex. NRC-018-B, at 13-24; *see also* Tribal Outreach Timeline, Ex. NRC-015 (listing Staff's efforts to obtain information for use in the Programmatic Agreement).

[200] Powertech Initial Findings of Fact and Conclusions of Law at 45-47.

afforded an opportunity to participate in a field survey, but the Oglala Sioux Tribe chose not to participate.[201]

6. Board Ruling

a. Contention 1A

To fulfill the agency's NEPA and NHPA responsibilities to protect and preserve cultural, religious, and historical sites important to the Native American tribal cultures in the Powertech project area, the NRC Staff must conduct a study or survey of tribal cultural resources before granting a license. Haimanot Yilma, NRC Staff witness and project manager for the Staff's environmental review of the Dewey-Burdock application, testified that "under NEPA, we're supposed to be looking at cultural resources. Historical property is a subset of cultural resources and so therefore any information that [is] provided under the NHPA historical properties [is] a subset of NEPA review. So we have to consider them under the NEPA review."[202]

As part of its application, Powertech submitted a Class III archeological survey of the Dewey-Burdock site.[203] A Class III archeological survey involves a professionally conducted, pedestrian survey of an entire target area to identify properties that may be eligible for inclusion on the National Register of Historic Places.[204] This on-the-ground survey describes the distribution of properties in an area; determines the number, location, and condition of properties; determines the types of properties actually present within the area; permits classification of individual properties; and records the physical extent of specific properties.[205] A Class III survey, however, is not the same as a cultural resources survey or a traditional cultural properties survey. A Class III survey can satisfy the requirements of the NHPA and identify a property's eligibility to be added to the National Register of Historic Places.[206] However, as the NRC Staff testified, a Class III survey "wouldn't necessarily identify all of the [Native American cultural and religious] resources primarily because some of the knowledge is not available to those conducting a Level 3 survey. That would be provided by the Native American groups themselves."[207] The category of "cultural resources"

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[201] *Id.* at 41-44.

[202] Tr. at 785.

[203] Level III Cultural Resources Evaluation, Ex. APP-009.

[204] *Montana Wilderness Association v. U.S. Department of Interior*, 725 F.3d 988, 1005-06 (2013) (citing BLM Manual 8110 (Release 8-73, Dec. 3, 2004)).

[205] *Id.*

[206] Tr. at 762.

[207] Tr. at 762-63.

"covers a wider range of resources than 'historic properties,' such as sacred sites, archaeological sites not eligible for the National Register of Historic Places, and archaeological collections."[208]

With respect to identifying historic properties, the NRC Staff has complied with the NHPA requirement to make a good faith and reasonable effort to identify properties that are eligible for inclusion in the National Register of Historic Places within the Dewey-Burdock ISL project area. The ACHP's guidance states that a reasonable and good faith effort may consist of "one or more methodologies" of identifying historic properties,[209] and the Staff used, to varying extents, four of the five methodologies specified in ACHP regulations: background research, consultation, field investigations, and field surveys.[210] The only methodology that the Staff did not use was oral history interviews.[211] We find that these efforts satisfy the NHPA with respect to historic properties.

The more difficult question is whether the methodologies the NRC Staff employed to identify tribal cultural, religious, and historic resources satisfied the NHPA and the NEPA hard look.[212] Although the NRC Staff points to the concurrence of the ACHP and the South Dakota State Historic Preservation Officer in the context of the NHPA § 106 investigation as evidence that NEPA's hard look has been satisfied,[213] it does not follow that a review that satisfies the NHPA necessarily satisfies NEPA requirements to take a hard look at cultural resources affected by a project.[214] Although the NHPA and NEPA resemble each other in certain respects, compliance with the NHPA "does not relieve a federal

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[208] NEPA and NHPA Handbook, Ex. NRC-048, at 4.

[209] Ex. NRC-047, Advisory Council on Historic Preservation, Meeting the "Reasonable and Good Faith" Identification Standard in Section 106 Review at 2 (Nov. 2011).

[210] Ex. NRC-001, NRC Staff's Initial Testimony (June 20, 2014) at 5-9 [hereinafter NRC Staff's Initial Testimony, Ex. NRC-001]; Ex. NRC-151, NRC Staff's Rebuttal Testimony (July 15, 2014) at 7-8 [hereinafter NRC Staff's Rebuttal Testimony, Ex. NRC-151].

[211] NRC Staff's Initial Testimony, Ex. NRC-001, at 8-9.

[212] 42 U.S.C. § 4321 *et seq.*

[213] Ex. NRC-018-E, Programmatic Agreement, Advisory Council on Historic Preservation Signature Page (Apr. 7, 2014); Ex. NRC-031, Letter from Advisory Council on Historic Preservation to Standing Rock Sioux Tribe on Dewey-Burdock Project at 3; Ex. NRC-018-G, Programmatic Agreement, South Dakota State Historic Preservation Officer Signature Page.

[214] *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-05-26, 62 NRC 442, 472 (2005) ("Although an agency may coordinate and, where practicable, integrate its NEPA and NHPA review efforts, the two statutes impose separate and distinct obligations.") (citation omitted); *see also Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Department of Interior*, 608 F.3d 592, 606, 610 (9th Cir. 2010) (concluding that an agency failed to take a hard look at cumulative impacts on cultural resources under NEPA even though the agency had satisfied its obligations under NHPA to consult with the tribe).

agency of the duty of complying with the [environmental] impact statement requirement 'to the fullest extent possible.'"[215]

The Commission's regulations in 10 C.F.R. § 51.71(b) require the NRC Staff to include in an EIS "an analysis of significant problems and objections raised by . . . any affected Indian tribes and by other interested persons."[216] For a variety of reasons,[217] the FSEIS in this proceeding does not contain an analysis of the impacts of the project on the cultural, historical, and religious sites of the Oglala Sioux Tribe and the majority of the other consulting Native American tribes.[218] The field surveys conducted in 2013 by members of seven tribes and the three sets of findings submitted do not satisfy this requirement.[219] Because the cultural, historical, and religious sites of the Oglala Sioux Tribe have not been adequately catalogued, the FSEIS does not include mitigation measures sufficient to protect this Native American tribe's cultural, historical, and religious sites that may be affected by the Powertech project.

Accordingly, as to Contention 1A, the Board finds and concludes that the FSEIS has not adequately addressed the environmental effects of the Dewey-Burdock project on Native American cultural, religious, and historic resources. Without additional analysis as to how the Powertech project may affect the Sioux Tribes' cultural, historical, and religious connections with the area, NEPA's hard look requirement has not been satisfied, and potentially necessary mitigation measures have not been established. The NRC Staff did not give this issue its required hard look in the FSEIS, and therefore the Record of Decision is incomplete.

b. Contention 1B

With respect to Contention 1B, the NRC Staff/tribal consultation process broke down,[220] and the vast majority of the consulting tribal parties, including the Oglala Sioux Tribe, did not participate in the field survey opportunity provided by the NRC Staff and Powertech. The consulting parties and the NRC Staff could agree

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[215] *Preservation Coalition, Inc. v. Pierce*, 667 F.2d 851, 859 (9th Cir. 1982) (quoting 42 U.S.C. § 4332).

[216] The Oglala Sioux Tribe raised its cultural, historical, and religious problems and objections in a timely manner, and pursued these concerns throughout the NEPA process.

[217] Some of these reasons relate to difficulties encountered in the consultation efforts between the NRC Staff and the Native American Tribes, including the Oglala Sioux Tribe.

[218] NEPA compels agencies to take a hard look at "preserv[ing] important historic [and] cultural . . . aspects of our national heritage." 42 U.S.C. § 4331(b)(4).

[219] While more comprehensive than the Powertech Class III survey because it included some tribal participation, the additional April 2013 survey done at the behest of the NRC Staff as part of the Staff's efforts to comply with NHPA and NEPA did not contain any tribal ethnographic studies, oral histories, or a survey of sites of significance to the intervenor, the Oglala Sioux Tribe.

[220] *See above*, Parts IV.A.3 and IV.A.5 of this Partial Initial Decision.

on neither the scope, techniques, or timing of the field surveys, nor alternatives to a field survey to address Native American cultural, religious, and historic concerns.

Even after a thorough review of the record in this case, the Board is not able to decide definitively which party or specific actions led to the impasse preventing an adequate tribal cultural survey. But the Board does take note that witnesses for the Intervenors,[221] the NRC Staff,[222] and Powertech[223] all agreed that tribal representatives must prepare the cultural survey along with any archeological survey team.

The NRC Staff is at least partly at fault for the failed consultation process. For the past 5 years the Oglala Sioux Tribe has raised its concerns with the consultation process, and yet the NRC Staff has not held a single consultation session, on a government-to-government basis, solely with members of the Oglala Sioux Tribe. Instead, the NRC Staff has held three face-to-face sessions with multiple tribes concerning multiple ISL projects in both South Dakota and Nebraska.[224] The three meetings cited by the NRC Staff as government-to-government consultations were large group meetings, with members of many diverse tribes, all with varying degrees of attachment to the Black Hills area of South Dakota.[225] Though numerous letters were sent to the Oglala Sioux Tribe, as detailed above, quantity does not necessarily equate with meaningful or reasonable consultation, and "doesn't in itself show the NHPA-required consultation occurred."[226] The Oglala Sioux Tribe has shown it has the most direct historical, cultural, and religious ties to the area.[227] The Oglala Sioux Tribe's Pine Ridge reservation is located approximately 50 miles from the project site.[228] The Oglala Sioux Tribe is both a consulting party and an Intervenor in this proceeding. It is entitled to a meaningful, face-to-face, government-to-government consultation session with the NRC Staff regarding this specific project. To be sure, the Oglala Sioux Tribe does share some responsibility for the inadequacy of the FSEIS and the lack of meaningful consultation. While the Oglala Sioux Tribe argues that its input to the FSEIS

[221] Tr. at 764.

[222] Tr. at 757.

[223] Tr. at 758.

[224] Tr. at 825-30.

[225] A large group meeting, run more as an information gathering session and less as a government-to-government consultation, is inconsistent with NRC Staff guidance "to encourage Tribes to participate in the NRC regulatory process." Tribal Protocol Manual at 10; *see also* Tr. at 827-30.

[226] *Quechan Tribe of Fort Yuma Indian Reservation v. U.S. Department of Interior*, 755 F. Supp. 2d 1104, 1118 (S.D. Cal. 2010).

[227] Ex. OST-014, Declaration of Michael CatchesEnemy (Apr. 14, 2014); Ex. OST-015, Declaration of Wilmer Mesteth (Apr. 1, 2010); Ex. OST-017, Letter from Bryan Brewer, Sr., President of the Oglala Sioux Tribe, to Kevin Hsueh, NRC Environmental Review Branch Chief (Mar. 22, 2013).

[228] FSEIS, NRC-008-A-1, Executive Summary at xliv.

is essential, some of its demands to engage with the NRC Staff were patently unreasonable.[229]

As to Contention 1B, the Board finds and concludes that the consultation process between the NRC Staff and the Oglala Sioux Tribe was inadequate.

c. Board Order on Contentions 1A and 1B

The FSEIS has not adequately addressed the environmental effects of the Dewey-Burdock project on Native American cultural, religious, and historic resources, and the required meaningful government-to-government consultation between the Oglala Sioux Tribe and the NRC Staff has not taken place. Because of these facts, procedures must be put in place to assure that the required NEPA hard look is taken, the NRC's Part 51 environmental regulations are satisfied, and an opportunity for meaningful consultation is provided.[230]

Though the license has already been issued, the land disturbance in the project area will proceed in stages,[231] and NEPA requires that agencies take a hard look at the environmental effects of actions even after a proposal has received initial approval.[232] Meaningful consultation between the NRC Staff and the Oglala Sioux Tribe may still be undertaken to identify and mitigate any potential harm to Sioux cultural, historical, or religious sites, even though the Programmatic Agreement has been finalized.[233] We therefore conclude that additional consultation between the NRC Staff and the Oglala Sioux Tribe is necessary.[234] This additional consultation is required in order (1) to satisfy the hard look at impacts required by NEPA and to supplement the FSEIS, if necessary; and (2) to satisfy the consultation requirements of the NHPA.

The NRC Staff can remedy this deficiency in the Record of Decision in this proceeding by promptly initiating a government-to-government consultation with

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[229] These demands, outlined at the evidentiary hearing, include the definition of elected governmental representation, Tr. at 781-82, 850-51, and the funds requested to collect tribal cultural information, Tr. at 807, 810.

[230] NRC Staff guidance "supports meaningful consultation and collaboration with Tribal officials in the development of Federal policies that have Tribal implications [and] acknowledges the status of Tribes as domestic dependent sovereign nations." Tribal Protocol Manual at 9.

[231] Programmatic Agreement, Ex. NRC-018-A. "The NRC determined a phased process for compliance with Section 106 of the NHPA is appropriate for this undertaking, as specifically permitted under 36 CFR § 800.4(b)(2), such that completion of the evaluation of and determinations of effects on historic properties, and consultation concerning measures to avoid, minimize, or mitigate any adverse effects will be carried out in phases, as set forth in this Programmatic Agreement." *See id.* at 2.

[232] *Marsh*, 490 U.S. at 374.

[233] The Programmatic Agreement is, by its terms, "a condition on the NRC License." Programmatic Agreement, Ex. NRC-018-A, at 4.

[234] The Oglala Sioux Tribe is both an intervenor in this case as well as a consulting party.

the Oglala Sioux Tribe to identify any adverse effects to cultural, historic, or religious sites of significance to the Oglala Sioux Tribe that may be impacted by the Powertech Dewey-Burdock project. This would then allow the adoption of mitigation measures, as necessary. The FSEIS and Record of Decision in this case must be supplemented, if necessary, to include any cultural, historic, or religious sites identified and to discuss any mitigation measures necessary to avoid any adverse effects.

Finally, given our conclusion that the inadequate discussion of potential impacts to Sioux cultural, historical, or religious sites in the FSEIS or Record of Decision is a significant deficiency in the NRC Staff's NEPA review, this Board could require the immediate suspension of the issued materials license.[235] However, the Board declines to do so because the Oglala Sioux Tribe bears some responsibility for lack of information on this issue, and did not participate in the April 2013 field survey effort.[236] Instead, the Board will retain jurisdiction of this case pending the NRC Staff's curing of the deficiencies in Contentions 1A and 1B. The NRC Staff will submit a monthly status report to the Board on the first business day of every month beginning June 2015 describing the consultations with the Oglala Sioux Tribe and the process being made in identifying Sioux tribal cultural, historic, or religious sites impacted by the Powertech project.[237] In the interim, if the Oglala Sioux Tribe can identify specific cultural, historic, or religious sites that are subject to immediate and irreparable harm by the Powertech project, they may, within 10 days of this Order, petition this Board for a stay of the license's effectiveness, as may be necessary to halt ground disturbing activities, with party responses to such a stay request due 10 days thereafter.[238]

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[235] *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), CLI-06-8, 63 NRC 235, 238 (2008) ("If the Board determines after full adjudication that the license amendment should not have been granted, it may be revoked (or conditioned).").

[236] An opportunity is being provided for the Oglala Sioux Tribe and the NRC Staff to consult in a meaningful manner as the project moves forward. If the Oglala Sioux Tribe refuses to engage in a meaningful consultation or makes unreasonable demands as a precondition for its cooperation in identifying cultural, historic, or religious sites, such actions would be fundamentally unfair to the NRC Staff, Powertech, and incompatible with an orderly administrative process. All parties have an obligation to cooperate to resolve these contentions.

[237] These status reports should take the same form as the status reports the NRC Staff submitted to this Board, per a Board Order, starting in 2010. Licensing Board Order (Prehearing Conference Call Summary and Initial Scheduling Order) (Oct. 4, 2010) at 6 (unpublished) ("So as to keep the Board, the parties, and the public abreast of any changes in this schedule, we hereby direct the NRC Staff to submit a monthly status report on November 1, 2010, to be updated on the first business day of each month thereafter.").

[238] Licensing Board Order (Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600) (May 20, 2014) at 2-4, 7-8 (unpublished).

B. Contention 2: The FSEIS Fails to Include Necessary Information for Adequate Determination of Baseline Groundwater Quality

1. Legal Standards

The NRC has issued numerous regulations and Staff guidance documents on groundwater quality standards at ISL facilities. Criterion 7 of 10 C.F.R. Part 40, Appendix A requires an applicant to establish "a preoperational monitoring program [that] must be conducted to provide complete baseline data on a milling site and its environs." These criteria were developed for conventional uranium milling facilities, but have been applied, in at least limited fashion, to ISL facilities.[239] In addition, background water quality data are used to establish existing hazardous constituent concentrations in an aquifer, which can then be used to set 10 C.F.R. Part 40, Appendix A, Criterion 5B(5) post-operational concentration limits. Both NUREG-1569[240] and Regulatory Guide 4.14[241] also discuss environmental monitoring. Although this Board is not bound to follow Staff guidance documents, which do not have the binding force of statutes or regulations, a Board must provide sufficient justification if it chooses not to accept Staff guidance.[242] Notably, for the purposes of resolving this contention, neither "baseline" nor "background" is explicitly defined in 10 C.F.R. Part 40, Appendix A, Section 2.7.3 of NUREG-1569, or Regulatory Guide 4.14.

2. Parties' Positions

In Contention 2,[243] the Oglala Sioux Tribe alleges that:

> the FSEIS violates 10 C.F.R. Part 40, Appendix A, Criterion 7, 10 C.F.R. §§ 51.10, 51.70 and 51.71, and the National Environmental Policy Act, and implementing regulations . . . in that it fails to provide an adequate baseline groundwater character-

[239] *Hydro Res.*, CLI-99-22, 50 NRC at 8 ("While, as a general matter, Part 40 applies to ISL mining, some of the specific requirements in Part 40, such as many of those found in Appendix A, address hazards posed only by conventional uranium milling operations, and do not carry over to ISL mining.").

[240] Ex. NRC-013, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards, Standard Review Plan for In Situ Leach Uranium Extraction License Applications, NUREG-1569 (June 2003) [hereinafter NUREG-1569, Ex. NRC-013].

[241] Ex. NRC-074, Radiological Effluent and Environmental Monitoring at Uranium Mills, Regulatory Guide 4.14 (Rev. 1 Apr. 1980) [hereinafter Regulatory Guide 4.14, Ex. NRC-074]. From a regulatory standpoint, ISL facilities are considered uranium mills.

[242] *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), CLI-15-6, 81 NRC 340, 359 (2015) (finding Boards should accord "special weight" to Staff guidance).

[243] LBP-14-5, 79 NRC at 401.

> ization or demonstrate that ground water samples were collected in a scientifically defensible manner, using proper sample methodologies.[244]

Further, the Oglala Sioux Tribe contends that "while the FSEIS contains data from 2007-2009, the background water quality for use in the actual regulatory process [*e.g.*, Appendix A, Criterion 5B(5)] for the facility will be established [at] a future date, outside of the NEPA process, and outside of the public's review."[245] The Oglala Sioux Tribe contends that this approach is a prima facie violation of the NEPA process.[246]

As support, the Oglala Sioux Tribe cites 10 C.F.R. Part 40, Appendix A, Criterion 7 which states that "regulations require the applicant to provide '*complete* baseline data on a milling site and its environs.'"[247] Further, the Oglala Sioux Tribe claims that NRC Regulatory Guide 4.14 is outdated and was not designed for ISL mining, and the NRC Staff's reliance on this guidance "to designate the boundary for which groundwater monitoring will be required'" is improper.[248] The Oglala Sioux Tribe also notes the lack of analysis of past mining impacts in the project area.[249]

The NRC Staff and Powertech both acknowledge that Powertech will collect the additional background groundwater quality information necessary to satisfy Appendix A, Criterion 5B(5) post-license issuance but pre-operation. In fact, Powertech asserts that installing the wells needed to establish Criterion 5 background concentrations prior to license issuance would be a violation of the "Construction Rule" and therefore automatic grounds for denial of the license.[250]

The NRC Staff defends the baseline groundwater quality analysis performed in the FSEIS as adequate under NEPA.[251] The NRC Staff first offers the explanation that there is a distinction between the groundwater quality terms "baseline" and "background" as used in the FSEIS.[252] "Baseline" data are submitted to

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[244] Oglala Sioux Tribe Post-Hearing Initial Brief at 38.

[245] *Id.*

[246] Oglala Sioux Tribe Post-Hearing Initial Brief at 39.

[247] Oglala Sioux Tribe Statement of Position at 21.

[248] *Id.*

[249] Oglala Sioux Tribe Post-Hearing Initial Brief at 39.

[250] Powertech (USA), Inc. Initial Statement of Position (June 20, 2014) at 39 [hereinafter Powertech Statement of Position]. The "Construction Rule" in 10 C.F.R. § 40.32(e) prohibits commencement of construction prior to a NEPA determination.

[251] NRC Staff's Initial Statement of Position (June 20, 2014) at 25 [hereinafter NRC Staff Statement of Position].

[252] NRC Staff's Initial Testimony, Ex. NRC-001, at 30-31. We note, however, that neither "baseline" nor "background" is explicitly defined in the FSEIS. This contention might have been rendered moot, or at the very least more easily resolved, had the NRC Staff documents explicitly and clearly defined these important words.

the NRC under 10 C.F.R. § 51.45(b), and describe "the results of Powertech's preoperational or baseline groundwater quality sampling program provid[ing] data on project-wide groundwater conditions."[253] "Background" data carry a separate meaning, and describe the groundwater quality in certain designated wells to "establish standards for aquifer restoration after uranium recovery is complete" but not to characterize the groundwater quality in the ISL environment generally.[254] Background values must be established before beginning ISL uranium production "in accordance with Criterion 5B(5) in Appendix A."[255] Although baseline data must be submitted to the NRC in an application, the NRC Staff argues that background data need not be submitted as part of the initial application.[256] The NRC Staff views obtaining background data as a monitoring requirement, and thus argues that "the EIS is sufficient as long as it adequately describes the process by which the monitoring data will be obtained."[257]

The NRC Staff also rejects any claims that necessary information related to past activities was excluded from the NEPA review process. For example, the NRC Staff argues that it was unnecessary to account for past mining activity in its baseline groundwater quality data.[258] The NRC Staff asserts that the purpose of baseline data is to describe the existing environmental conditions, including any impacts past mining had on the Dewey-Burdock site.[259] The NRC Staff further asserts that the impact of past mining on the site (i.e., relative to "pre-baseline" conditions) is considered in the "cumulative impacts" section of the FSEIS, and is outside the scope of Contention 2.[260] The NRC Staff also defends some groundwater chemical constituents lacking a reference in the FSEIS.[261] The NRC Staff states that all relevant environmental information was considered, as required by NEPA, but that NEPA does not also "require the Staff to repeat all this information in the FSEIS."[262] The NRC Staff maintains that references to Powertech documents, which do analyze the chemical constituents not mentioned in the FSEIS, satisfies the "obligation to disclose relevant information."[263] Finally, the NRC

[253] *Id.* at 30. Baseline data are later "used to evaluate future impacts on facility operations or accidental or unplanned releases." *Id. See also* NRC Staff Statement of Position at 25.

[254] NRC Staff's Initial Testimony, Ex. NRC-001, at 31; *see also* NRC Staff Statement of Position at 26.

[255] NRC Staff's Initial Testimony, Ex. NRC-001, at 31.

[256] NRC Staff Statement of Position at 26.

[257] *Id.* at 26. The NRC Staff further asserts that it "describes this process in Condition 11.3 of Powertech's license, thereby complying with NEPA." *Id.*

[258] *Id.* at 27.

[259] *Id.*

[260] *Id.* at 27-28.

[261] *Id.* at 29.

[262] *Id.*

[263] *Id.*

Staff defends the methods used by Powertech to collect data as "consistent with Staff guidance" in Section 2.7.3 of NUREG-1569 and Regulatory Guide 4.14.[264] The NRC Staff believes the guidance describes data collection methods which will sufficiently describe the environment and evaluate groundwater quality.[265]

Powertech concurs with the NRC Staff's interpretation of the required "baseline" and "background" data and cites the process outlined in NUREG-1569:

> Reviewers should keep in mind that the development and initial licensing of an in situ leach facility is not based on comprehensive information. This is because in situ leach facilities obtain enough information *to generally locate the ore body and understand the natural systems involved.* More detailed information is developed as each area is brought into production. . . . [R]eviewers should ensure that sufficient information is presented to reach only the conclusion necessary for initial licensing.[266]

Powertech also defends the use of NRC guidance documents in setting the specific groundwater sampling program.[267]

3. Summary of Key Evidence

In addition to the legal arguments in support of Contention 2, the Oglala Sioux Tribe also relies on the testimony of Robert Moran.[268] Dr. Moran raised technical concerns relative to this contention due to (1) the lack of analysis of impacts of past mining activities on baseline groundwater quality; (2) the lack of detailed existing water quality information necessary to develop reliable and scientifically defensible baseline analysis; and (3) analytical results that rely solely on data provided by the project proponent to the exclusion of data available from external

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[264] *Id.* at 31.

[265] *Id.* at 32.

[266] Powertech Statement of Position at 39, quoting NUREG-1569, Ex. NRC-013, at 40 (emphasis added by Powertech).

[267] *Id.* at 42-43.

[268] Ex. OST-001, Opening Written Testimony of Dr. Robert E. Moran, Curriculum Vitae (June 20, 2014) at 29 [hereinafter Moran Testimony, Ex. OST-001].

Despite the Oglala Sioux Tribe and Consolidated Intervenors' mention of Dr. Richard Abitz in their post-hearing briefs, we were unable to locate anything in the record from Dr. Abitz addressing the proposed Dewey-Burdock ISL facility. A letter from Dr. Abitz appears to address a site characterization plan for a proposed Powertech facility in Weld County, CO. Ex. INT-002, Geochemical Consulting Services LLC Comments on Powertech's Proposed Baseline Plan (Oct. 31, 2009).

agencies.[269] Much of Dr. Moran's written testimony was relatively general, and Dr. Moran acknowledged that his experience with ISL facility licensing was limited.[270] Questioned at the evidentiary hearing on what specific detailed water quality information he alleged was missing, Dr. Moran mentioned data for the elements strontium and lithium.[271]

Regarding the lack of analysis of the impacts of past mining activities, NRC Staff witnesses James Prikryl[272] and Thomas Lancaster[273] testified regarding the NRC Staff's interpretation of preoperational baseline groundwater quality, which is assessed "so that corrective actions can be taken if adverse water quality conditions resulting from the proposed action are detected."[274] Witnesses Mr. Prikryl and Mr. Lancaster further testified that "[u]nder regulations issued by the Council on Environmental Quality . . . the environmental impacts that result from past actions are assessed as 'cumulative effects'" [and that] the NRC Staff "appropriately discussed this information in the context of cumulative impacts, rather than in the context of preoperational water quality."[275]

Further, Powertech witness Errol Lawrence[276] testified that a "comparison between historical and recent data sets provided in Sec. 2.7.3.2.2 of the revised [Technical Report] (Exhibit APP-015-B at 2-217 through 2-230b) shows very little variation in groundwater quality between the data sets" and that "table 2.7-40 (Exhibit APP-015-B at 2-223) provides a statistical comparison between the historical and recent data sets and shows that the concentrations of alkalinity, specific conductance, pH and total dissolved solids (TDS) are very similar" and "do not provide any indication of widespread groundwater quality degradation within or near the project area as a result of historical mining and exploration activities."[277]

In regards to a lack of detailed existing water quality information necessary to develop a reliable and scientifically defensible baseline analysis, NRC Staff witnesses Mr. Prikryl and Mr. Lancaster further testified that Powertech followed NUREG-1569, used sampling methods that were consistent with standard industry

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[269] Several items, like the "chemical compositions and volumes of all solid and liquid wastes" listed in support of Contention 2 of Dr. Moran's opening testimony are outside the scope of the admitted contention. Moran Testimony, Ex. OST-001, at 17.

[270] Tr. at 1000-01.

[271] Tr. at 1007-08.

[272] Ex. NRC-006, James Prikryl Statement of Professional Qualifications.

[273] Ex. NRC-005-R, Thomas R. Lancaster Revised Statement of Professional Qualifications.

[274] NRC Staff's Initial Testimony, Ex. NRC-001 at 19.

[275] *Id.* at 20.

[276] Ex. APP-038, Errol Lawrence Curriculum Vitae.

[277] Ex. APP-066, Answering Testimony of Errol Lawrence at 3 (July 15, 2014) [hereinafter Lawrence Answering Testimony, Ex. APP-066].

practice, and analyzed chemical constituents and parameters using appropriate Environmental Protection Agency (EPA) and American Society for Testing and Materials (ASTM) standard methods."[278]

NRC Staff witnesses Mr. Prikryl and Mr. Lancaster also testified that the FSEIS data on quarterly groundwater samples from wells located within 2 kilometers (1.2 miles) of the site show that the preoperational baseline water quality meets Criterion 7 in 10 C.F.R. Part 40 Appendix A, and is adequate to assess how the Dewey-Burdock Project may affect groundwater quality.[279]

The NRC Staff witnesses Mr. Prikryl and Mr. Lancaster also testified that the approach of sampling within 2 kilometers of the site is consistent with NRC Regulatory Guide 4.14,[280] which the NRC Staff developed because conventional mill "tailings areas" have the potential to be a source of contamination to groundwater. Mr. Prikryl and Mr. Lancaster further testified that the use of the 2-kilometer guideline was validated in NUREG/CR-6705, "Historical Case Analysis of Uranium Plume Attenuation."[281] This report concluded that the average radiological plume dispersion at Uranium Mill Tailings Remedial Action sites is less than 2 kilometers.[282] However, the NRC Staff apparently did not consider that NUREG/CR-6705 specifically excludes ISL facilities from this 2-kilometer rule of thumb ("uranium plumes . . . [e]xceed roughly 2 km in length only in special cases *e.g.* where *in situ* leaching has been carried out").[283]

However, NRC Staff witnesses Mr. Prikryl and Mr. Lancaster also testified that

> the radius of 2 km [1.2 mi] from an ISR wellfield has been shown to be sufficient based on historical and current monitoring data from NRC licensed sites. There are no reported instances of contamination of any monitored private wells within or beyond 2 km of an ISR wellfield at any sites historically or currently licensed by the NRC (Ex. NRC-075)."[284]

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[278] NRC Staff's Rebuttal Testimony, Ex. NRC-151, at 14-15.

[279] NRC Staff's Initial Testimony, Ex. NRC-001, at 30-31.

[280] Regulatory Guide 4.14, Ex. NRC-074.

[281] Ex. NRC-076, Division of Regulatory Applications and Analysis, Office of Nuclear Regulatory Research, Historical Case Analysis of Uranium Plume Attenuation, NUREG/CR-6705 (July 20, 2014) [hereinafter NUREG/CR-6705, Ex. NRC-076].

[282] NRC Staff's Initial Testimony, Ex. NRC-001 at 29.

[283] NUREG/CR-6705, Ex. NRC-076, at 4.

[284] NRC Staff's Initial Testimony, Ex. NRC-001, at 29-30. We were unable to find a specific mention of a 2-kilometer radius in Exhibit NRC-075, Data on Groundwater Impacts at the Existing ISR Facilities.

4. Board Ruling

While we agree that the language of Appendix A regarding the relationship between Criterion 5 and 7 is ambiguous and that the terms "baseline" and "background" are not explicitly defined, we are bound by precedent. In *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), CLI-06-1, 63 NRC 1, 6 (2006) (citation omitted), the Commission affirmed that:

> Waiting until after licensing (although before mining operations begin) to establish definitively the groundwater quality baselines and upper control limits is, as the Presiding Officer stated, "consistent with industry practice and NRC methodology," given the sequential development of *in situ* leach well fields. The site-specific data to confirm proper baseline quality values, and confirm whether existing rock units provide adequate confinement cannot be collected until an *in situ* leach well field has been installed . . . .

Further, the Commission noted that "in this proceeding the Intervenors also have had the opportunity to litigate — and did litigate — whether the performance-based licensing complies with the Atomic Energy Act and National Environmental Policy Act (NEPA), and whether it accords undue discretion to the Licensee."[285]

More recently, the Licensing Board in *Strata Energy, Inc.* (Ross In Situ Recovery Uranium Project), LBP-15-3, 81 NRC 65, 91-92 (2015) rejected a very similar contention by noting:

> in light of the Commission's *Hydro Resources* decision and the language of Appendix A, Criterion 7A, we are unable to discern a legal basis for concluding that the Appendix A, Criterion 7 prelicensing monitoring program for the purpose of establishing existing characterization values for certain site groundwater constituents must be coextensive with the Criterion 7A preoperational monitoring, license condition-based program intended to provide the information needed for setting Appendix A, Criterion 5B groundwater protection standards and UCLs.

In this case, the Intervenors did not challenge any specific license conditions, only that the use of license conditions to establish background concentrations after licensing violated NEPA. However, based on the previous review in *Hydro Resources,* and recognizing the similar interpretation in *Strata,* we conclude that collection of groundwater quality data in a staggered manner is not in and of itself a violation of NEPA.[286]

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[285] *Hydro Res.,* CLI-06-1, 63 NRC at 5.

[286] Like our colleagues in *Strata,* we are also less convinced that anything in the "Construction Rule" would prohibit collection of any needed prelicense data.

Regarding the specific technical concerns of Dr. Moran, we find the testimony offered by NRC Staff witnesses Mr. Prikryl and Mr. Lancaster and Powertech witness Mr. Lawrence to be more detailed and more persuasive.

Finally, we turn to the Oglala Sioux Tribe's exhibits regarding an EPA Preliminary Assessment which are potentially relevant to Contention 2.[287]

On first inspection, the Preliminary Assessment's conclusion that the "lack of groundwater sampling data from near and upgradient of the Site limited availability of reliable background concentrations" appears dispositive of whether the FSEIS included the necessary information for adequate determination of baseline groundwater quality.[288] However, in considering the different objectives of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) versus NRC and NEPA regulations, we conclude that background/baseline is being used in two fundamentally different contexts. Under CERCLA, determining the unimpacted natural (i.e., upgradient) background is important in assessing the impact of past mining activities on the current state of the environment at the site. Under NRC and NEPA regulations, the site's current baseline is important in assessing the potential future impacts (both cumulative and incremental) of the proposed ISL facility on the current state of the environment at the site. Accordingly, we find that the identification and documentation of the historic mining operations as documented in the FSEIS is adequate to assess the incremental and cumulative impacts of the proposed project.

As a result, we find for Powertech and the NRC Staff on Contention 2.

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[287] Ex. OST-025, Darrow/Freezeout/Triangle Uranium Mine, EPA, Preliminary Assessment Announcement (Sept. 2014) is an announcement that EPA Region 8 has completed a Preliminary Assessment of the abandoned uranium mines located within and adjacent to the proposed Dewey-Burdock lSL Project in response to a citizen's petition under the Comprehensive Environmental Response, Compensation, and Liability Act. According to the announcement, a Preliminary Assessment is "designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation." *Id.* at 1. Ex. OST-026, Seagull Environmental Technologies, Inc., Preliminary Assessment Report Regarding the Darrow/Freezeout/Triangle Uranium Mine Site Near Edgemont, South Dakota at 35 (Sept. 24, 2014) [hereinafter Preliminary Assessment, Ex. OST-026] is the Preliminary Assessment report itself [hereinafter Preliminary Assessment]. Although the Oglala Sioux Tribe argued that Ex. OST-025, Darrow/Freezeout/Triangle Uranium Mine, EPA, Preliminary Assessment Announcement (Sept. 2014) and the Preliminary Assessment, Ex. OST-026, had relevance to Contentions 2, 3, 4, and 6, we saw little if anything in those exhibits relating to the ability of the site to contain ISL fluids (Contention 3), groundwater quantity (Contention 4), or mitigation measures (Contention 6).

[288] Preliminary Assessment, Ex. OST-026, at 35.

C. Contention 3: The FSEIS Fails to Include Adequate Hydrogeological Information to Demonstrate the Ability to Contain Fluid Migration and Assess Potential Impacts to Groundwater

1. Legal Standards

In this Partial Initial Decision the Board reviews the NRC Staff's FSEIS under the NEPA hard look standard.[289]

2. Parties' Positions

In Contention 3[290] the Oglala Sioux Tribe argues that the Dewey-Burdock site contains numerous geological and man-made features such as interfingering sediments, unplugged boreholes, breccia pipes/collapse structures, and faults and fractures that will permit unwanted groundwater migration.[291] Given these features, the Oglala Sioux Tribe and Consolidated Intervenors also argue that deferring collection of necessary data to confirm the ability of the site to contain production fluids violates NEPA.[292]

The NRC Staff argues that the evidence does not indicate the presence of faults, fractures, breccia pipes, and related features at the Dewey-Burdock site.[293] While the NRC Staff acknowledges that there are a number of improperly plugged or abandoned boreholes at the Dewey-Burdock site, they also argue that as a condition of its license Powertech must address these boreholes before beginning operations. Finally, the NRC Staff argues that although Powertech's license includes conditions requiring that it submit additional data on hydrogeological confinement before beginning operations in any wellfield, these conditions are consistent with NEPA, NRC regulations, and NRC guidance.[294]

Similarly, Powertech presented testimony and exhibits in support of its position that the ore-bearing formations at the Dewey-Burdock site are sufficiently hydrogeologically isolated to allow ISL operations to be conducted safely.

3. Summary of Key Evidence

The technical issue at the heart of Contention 3 is Intervenors' assertion that Powertech's conceptual model, which was adopted by the NRC Staff in the

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[289] This standard is fully explained above in Part II.B of this Partial Initial Decision.
[290] LBP-14-5, 79 NRC at 401.
[291] Oglala Sioux Tribe Post-Hearing Initial Brief at 45-46.
[292] *Id.*
[293] NRC Staff's Post-Hearing Reply Brief at 26.
[294] *Id.*

FSEIS, fails to account for natural and man-made hydraulic conductivity that makes it unlikely process waters can be contained within the mined formations.[295] Potential groundwater flow pathways enumerated by the Oglala Sioux Tribe's witness Robert Moran include (a) interfingering fluvial sediments, (b) fractures and faults, (c) breccia pipes and collapse structures, and (d) historical boreholes.[296] Consolidated Intervenors rely upon the testimony of Hannan LaGarry.[297] Powertech witnesses Hal Demuth,[298] Errol Lawrence, and Frank Lichnovsky[299] and NRC Staff witnesses James Prikryl, Thomas Lancaster, Paul Bertetti,[300] and Ronald McGinnis[301] provided testimony in support of hydrological confinement.

Because of the multiple potential fluid migration pathways raised by the Intervenors, we divide our analysis into general issues relating to fluid confinement (including interfingering sediments) and specific technical issues associated with faults, fractures and joints, breccia pipes, and boreholes. We address in turn each potential hydrological pathway, the evidence in the record as to each potential pathway, and conclude with our decision as to the sufficiency of the analysis of the potential for fluid migration.

a. General Issues

Intervenors assert that the physical nature of fluvial sandstones that host roll-front uranium deposits like those at the Dewey-Burdock site makes confinement nearly impossible because these formations typically interfinger with finer-grained silts and shales, allowing groundwater to flow between the different stratigraphic horizons.[302] Intervenors further maintain that a series of pumping tests conducted in 1979 and 2008 demonstrate that groundwater is not confined in the ore zone and that there is leakage between the various formations bounding the ore bodies. Dr. Moran, citing an analysis of the 1979 tests in the Dewey-Burdock area,[303] notes that the authors of that study concluded the Fuson Shale is inherently leaky owing to "the primary pore space and naturally occurring joints and fractures" as well as

[295] Oglala Sioux Tribe Petition, Ex. OST-010, at 22.
[296] Moran Testimony, Ex. OST-001, at 20.
[297] Ex. INT-004, Hannan E. LaGarry Curriculum Vitae.
[298] Ex. APP-014, Hal P. Demuth Curriculum Vitae.
[299] Ex. APP-073, Frank Lichnovsky Curriculum Vitae.
[300] Ex. NRC-159, F. Paul Bertetti Curriculum Vitae.
[301] Ex. NRC-160, Ronald N. McGinnis, Jr. Curriculum Vitae.
[302] Oglala Sioux Tribe Petition, Ex. OST-010, at 23.
[303] Ex. OST-006, Tennessee Valley Authority Analysis of Aquifer Tests Conducted at the Proposed Burdock Uranium Mine Site Burdock, South Dakota (Sept. 2012) [hereinafter TVA Aquifer Analysis, Ex. OST-006].

unplugged boreholes.[304] Dr. Moran rejects Powertech's assertion both that natural geologic features such as faults and breccia pipes play no role in transmitting water through the Fuson Shale and that the drawdown observed in the Fall River Formation during recent pumping tests was entirely attributable to improperly abandoned boreholes.[305] Dr. Moran also testified that the 2012 numerical models prepared by Petrotek (a consultant for Powertech) for the Dewey-Burdock site are unreliable because they are based on several improper simplifications and assumptions, the most significant of which is that the Fuson Shale is an effective aquitard.[306]

Dr. LaGarry contends (a) that groundwater in the Fall River and Chilson aquifers exists under artesian conditions, which he asserts will increase the likelihood that production waters could migrate vertically into adjacent aquifers or flow onto the surface, and (b) horizontal groundwater velocities of up to 35.5 meters per day for groundwater within the uranium-bearing strata could result in the rapid migration of contaminants outside the controlled area.[307]

Powertech and the NRC Staff witnesses maintain that the ore-bearing formations at the Dewey-Burdock site are sufficiently hydrogeologically isolated to allow ISL operations to be conducted safely. Powertech witness Mr. Demuth testified that the ore-bearing formations are confined above by the Graneros Group and below by thick shale horizons in the Morrison Formation. Mr. Demuth maintains that the 20- to 80-foot-thick Fuson Shale separating the two ore-bearing units in the Inyan Kara Group is an effective barrier to fluid migration.[308] Powertech witness Mr. Lawrence testified that the lower-permeability siltstones and mudstones that typically interfinger with sandstones in these deposits actually help control water flow and contribute to the hydrologic isolation of the ore-bearing sands.[309] Powertech witness Mr. Lichnovsky testified that analysis of geophysical logs for more than 3000 boreholes indicates the Fuson Shale is continuous and no less than 20 feet thick throughout the project area.[310]

Powertech witness Mr. Lawrence reviewed the 1979 aquifer tests cited by Dr. Moran and concluded that the leaks it found were most likely caused by

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[304] Moran Testimony, Ex. OST-001, at 19 (emphasis omitted).

[305] *Id.* at 24-25.

[306] *Id.* at 23-26.

[307] Ex. INT-020A, Expert Opinion Regarding the Proposed Dewey-Burdock Project ISL Mine near Edgemont, South Dakota at 3-4 (Aug. 19, 2014).

[308] Ex. APP-013, Written Testimony of Hal Demuth at 14 (June 20, 2014) [hereinafter Demuth Testimony, Ex. APP-013].

[309] Ex. APP-037, Written Testimony of Errol Lawrence at 20 (June 20, 2014) [hereinafter Lawrence Testimony, Ex. APP-037].

[310] Ex. APP-072, Answering Testimony Regarding NRC Staff's Analysis of TVA Well Log Data (Oct. 24, 2014) at 3.

open boreholes completed in both the Chilson and Fall River aquifers.[311] Mr. Lawrence testified that the 2008 pumping test focused in the Chilson sandstones caused a 91-foot drawdown in that aquifer but produced only a 1-foot drawdown response in the overlying Fall River aquifer, which he maintains is consistent with leakage through unplugged boreholes.[312] Powertech witness Mr. Demuth testified that the Fuson Shale is an effective hydraulic barrier in the absence of open boreholes. As support for this conclusion, he testified that the potentiometric surfaces (water level elevations) in paired wells completed in the Fall River and Chilson aquifers differ by as much as 40 feet whereas if the two aquifers were hydraulically connected these surfaces would be at approximately the same elevation.[313] Mr. Demuth also cited a U.S. Geological Survey study of the quality of groundwater in different aquifers in and around the Dewey-Burdock site[314] that he maintained further supports the conclusion that no significant transfer of water has occurred across the confining units between aquifers.[315] While admitting that uncertainties remain whether the Fuson Shale can function as a confining horizon throughout the entire Dewey-Burdock project area, Mr. Demuth emphasized that in the Burdock area, where production is located in the Chilson member, license conditions will require Powertech to place monitoring wells in the overlying Fall River aquifer to identify any lack of confinement.[316]

Regarding the question of artesian flow in the ore-bearing aquifers, both Powertech and the NRC Staff acknowledge that the Fall River and Chilson members host artesian aquifers in the project area. However, Powertech contends that this condition does not signify that either aquifer is in communication with overlying or underlying aquifers, but instead indicates they are hydraulically confined.[317] The NRC Staff testified that artesian flow concerns were addressed by including a license condition whereby Powertech must monitor twice monthly for excursions at the surface and thereby "limit the environmental impact of any excursion associated with artesian flow."[318] Dr. LaGarry asserted that horizontal groundwater velocity in the ore-zone aquifer could be as much as 35.5 meters

[311] Lawrence Testimony, Ex. APP-037, at 35.

[312] *Id.*

[313] Demuth Testimony, Ex. APP-013, at 15.

[314] Ex. APP-026, Raymond H. Johnson, Presentation to EPA, USGS Research at the Proposed Dewey-Burdock Uranium In-Situ Recovery Mine, Edgemont, South Dakota (Feb. 22, 2012).

[315] Demuth Testimony, Ex. APP-013, at 16.

[316] *Id.* at 29.

[317] Ex. APP-074, Answering Testimony Regarding Dr. LaGarry's Analysis of Borehole Log Data (Dec. 4, 2014) at 7 [hereinafter Borehole Log Data Answering Testimony, Ex. APP-074].

[318] Ex. NRC-175, NRC Staff's Answering Testimony at 6-7 (Dec. 9, 2014) [hereinafter NRC Staff's Answering Testimony, Ex. NRC-175].

per day.[319] Powertech witness Mr. Lawrence stated this velocity was calculated incorrectly, and that based on his "experience working with over a dozen permitted ISR facilities, groundwater flow velocities on the order of 10 feet per year are typical for ISR facilities."[320] Further, he cited a U.S. Geological Survey estimate of the horizontal flow velocity in the Chilson aquifer to be 4.34 meters per year, which he testified is of similar magnitude to Powertech's estimate and consistent with typical natural flow velocities at ISL facilities.[321]

b. Faults, Fractures, and Joints

Intervenors assert it is unlikely that production fluids can be contained within the ore zone aquifers because faults and joints in the project area create vertical permeability pathways between aquifers.[322] In response to Powertech's claims that there are no identified faults in the Dewey-Burdock project area,[323] Consolidated Intervenors' witness Dr. LaGarry explained that the Dewey Fault, which is only 1 mile northwest of the Dewey-Burdock property, is only the most prominent expression of a structural zone that contains numerous ancillary faults and joints that are likely to extend onto the site.[324] Dr. LaGarry further noted[325] that the Tennessee Valley Authority's (TVA) 1979 Draft Environmental Statement for a property that overlaps part of the present Dewey-Burdock site specifically mentions faults and fractures associated with the Dewey Fault,[326] and cites twelve examples in which faults are mentioned or otherwise indicated in the written notes on drillers' logs prepared during TVA's evaluation of the Dewey-Burdock deposits in the late 1970s.[327] Dr. Moran asserted that satellite imagery of the Dewey-Burdock area shows that the site is intersected by numerous faults and fractures.[328] In response to Board questions about whether geophysical well logs

[319] Ex. INT-013, Opening Written Testimony of Dr. Hannon [sic] LaGarry at 6 (June 20, 2014).

[320] Lawrence Answering Testimony, Ex. APP-066, at 11.

[321] Ex. APP-041, Raymond H. Johnson, Presentation to EPA, Using Groundwater and Solid-Phase Geochemistry for Reactive Transport Modeling at the Proposed Dewey-Burdock Uranium In-Situ Recovery Site, Edgemont, South Dakota at 36 (Apr. 11, 2012).

[322] Oglala Sioux Tribe Petition, Ex. OST-010, at 23.

[323] Ex. APP-015-B, Powertech, Dewey-Burdock Project Application for NRC Uranium Recovery License, Technical Report § 2.6.2.1 (Rev. Dec. 2013).

[324] Tr. at 1065.

[325] Tr. at 1073.

[326] Ex. OST-009, Tennessee Valley Authority Draft Environmental Statement, Edgemont Uranium Mine at 60 (Aug. 30, 1978) [hereinafter TVA Draft Environmental Statement, Ex. OST-009].

[327] Ex. OST-029, Written Supplemental Testimony of Dr. Hannan LaGarry at 2 (Nov. 21, 2014) [hereinafter LaGarry Supplemental Testimony, Ex. OST-029].

[328] Moran Testimony, Ex. OST-001, at 21; Ex. OST-005, Robert E. Moran, Powerpoint Presentation at 29 (Aug. 19, 2014) [hereinafter Moran Presentation, Ex. OST-005]; Tr. at 1078.

would reveal the presence of faults, Dr. LaGarry explained that small faults with only a few meters of offset are commonly overlooked but could be detected by careful examination of electrical resistivity logs if the spacing of the boreholes were close enough.[329] Finally, Dr. LaGarry asserted that even if pumping tests show that faults and fractures do not presently act as conduits for groundwater, the use of oxidizing lixiviant during mining could dissolve minerals that had been deposited along fault surfaces and "uncork" these pathways between aquifers.[330]

Powertech and NRC Staff witnesses maintain that no faults have been identified within the Dewey-Burdock permit area[331] but that, if undetected faults or joints are present on the site, they would not significantly affect the hydrogeology.[332] Many of these witnesses relied heavily on the geologic cross sections or "fence diagrams" developed from electrical resistivity logs of boreholes (e-logs) to demonstrate that faults have not caused significant offsets in the distinctive stratigraphic horizons.[333] In particular, the NRC Staff reviewed e-logs from closely spaced drill holes that transect the lineaments that Dr. Moran interpreted as faults.[334] Based on fence diagrams constructed using these logs,[335] the NRC Staff concluded that the subsurface strata do not show evidence of faulting.[336] In response to Dr. LaGarry's analysis of notes on drillers' logs purporting to contain twelve references to faults present on the project site, witnesses for both Powertech and NRC Staff asserted that whereas geophysical well logs provide objective data that can be examined and interpreted by experts, drillers' comments recorded at the time the boreholes were constructed are subjective observations by persons whose qualifications are unknown.[337] Powertech further asserted that references to "offsets" in drillers' remarks on two of Intervenors' exhibits[338] were incorrectly interpreted by Dr. LaGarry as referring to faults, whereas the term used in these drillers' notes refers to the location of the drill hole.[339] In addition, Powertech investigated the site

[329] Tr. at 1075.

[330] Tr. at 1084.

[331] FSEIS, Ex. NRC-008-A-1, § 3.4.3.

[332] Lawrence Answering Testimony, Ex. APP-066, at 6.

[333] Lawrence Testimony, Ex. APP-037, at 20; NRC Staff's Rebuttal Testimony, Ex. NRC-151, at 20; Tr. at 1107.

[334] Moran Presentation, Ex. OST-005, at 29.

[335] Ex. NRC-168, Transect 1 — Fence Diagram of Drill Hole Resistivity Logs (Oct. 14, 2014) [hereinafter Transect 1, Ex. NRC-168]; Ex. NRC-169, Transect 2 — Fence Diagram of Drill Hole Resistivity Logs (Oct. 14, 2014) [hereinafter Transect 2, Ex. NRC-169].

[336] Ex. NRC-158, Supplemental Testimony Regarding NRC Staff's Analysis of TVA Well Log Data (Oct. 14, 2014) at 12 [hereinafter NRC Staff Well Log Data Supplemental Testimony, Ex. NRC-158].

[337] Borehole Log Data Answering Testimony, Ex. APP-074, at 3; NRC Staff's Answering Testimony, Ex. NRC-175, at 14.

[338] Ex. OST-034, DS392 Driller Remarks; Ex. OST-036, IHM32 Driller Remarks.

[339] Borehole Log Data Answering Testimony, Ex. APP-074, at 13-14.

of historical drill hole IHK2, where drillers' remarks indicated the presence of an east-west trending fault zone, by conducting a field check of the site and by constructing two cross sections based on e-logs of closely spaced drill holes. In Powertech's estimation, neither indicated the presence of a fault.[340]

c. Breccia Pipes

Intervenors contend that the presence of natural breccia pipe formations in the Dewey-Burdock area create additional vertical permeability pathways between aquifers.[341] Dr. Moran specifically cited the 1974 geological report by Gott et al.[342] as support for his assertion that breccia pipes and collapse structures occur near the Dewey-Burdock project area.[343] Dr. Moran further stated that circular features visible on satellite imagery of the project site "likely represent solution/collapse structures," and he indicated the outline of one of these features on a satellite image.[344] Additional testimony by Dr. LaGarry[345] maintained that drillers' notes from the 1970s TVA project document a sinkhole on the Dewey-Burdock site associated with two closely spaced faults.[346]

Powertech witness Mr. Lawrence responded by noting that concerns about collapse structures on the Dewey-Burdock site were specifically addressed by a numerical model that simulated the potentiometric groundwater surface that would result from discharge of groundwater into the Chilson Member via a hypothetical breccia pipe.[347] Referring to the results of the numerical model,[348] he stated that the effect on the aquifer surface would be readily discernible with the current monitor well network but that no such recharge mound has been detected. Regarding the purported collapse feature identified by Dr. Moran on satellite images, Powertech geologist Mr. Lichnovsky testified that he field-checked the specific site and determined that the feature was an open depression caused by erosion and was not a sinkhole.[349] In addition, the NRC Staff conducted an analysis

[340] *Id.* at 14.

[341] Moran Testimony, Ex. OST-001, at 21-22.

[342] Ex. NRC-081, Garland B. Gott, Don E. Wolcott & C. Golbert Bowles, Stratigraphy of the Inyan Kara Group and Localization of Uranium Deposits, Southern Black Hills, South Dakota and Wyoming, Geological Survey Professional Paper 763 (1974).

[343] Moran Testimony, Ex. OST-001, at 22.

[344] *Id.* at 22; Moran Presentation, Ex. OST-005, at 13.

[345] LaGarry Supplemental Testimony, Ex. OST-029, at 3.

[346] Ex. OST-033, DS178 Driller Remarks.

[347] Lawrence Answering Testimony, Ex. APP-066, at 6.

[348] Ex. APP-025, Petrotek, Numerical Modeling of Hydrogeologic Conditions, Dewey-Burdock Project South Dakota at 26 (Feb. 2012).

[349] Tr. at 1126.

of e-logs for five drill holes in the vicinity of the circular feature identified by Dr. Moran and reported that neither the land surface profile nor the stratigraphic horizons showed evidence of a sinkhole-like structure or any discontinuity that might result from brecciation.[350] Finally, in response to Dr. LaGarry's assertion that a sketch drawn on the back of a driller's lithologic log depicts a sinkhole and two parallel faults, Powertech witness Mr. Lichnovsky noted that the sketch is unlabeled and that the hash marks on the circular feature point outward, indicating a dome, rather than inward, which would be the usual way to indicate a circular depression.[351]

d. Historical Boreholes

Intervenors first note that the NRC Staff and Powertech acknowledge that unplugged or improperly abandoned historical boreholes occur on the Dewey-Burdock project site. Intervenors then contend that leaky boreholes can provide pathways for waters to mix between the mineralized zones and the surrounding aquifers.[352] Based on a review of drillers' comments on logs of historical TVA boreholes, Dr. LaGarry cited specific examples of old boreholes that were uncased, displayed artesian water, or had been plugged with wood fence posts or broken steel, asserting that these examples indicate open drill holes that could potentially serve as fluid pathways.[353] Dr. Moran disputed the NRC Staff's and Powertech's assertion that leaking boreholes would necessarily produce wet areas detectable by satellite color infrared imagery (CIR). Dr. Moran also noted that old boreholes can connect water-bearing units without producing flowing water.[354] In addition, Intervenors objected to the NRC Staff's acceptance of Powertech's plan to locate and plug historical boreholes at some later date. Instead, Intervenors maintained that the FSEIS must discuss how old boreholes will be identified and must explain the methodology that will be used to assess the effectiveness of plugging and abandonment.[355]

Powertech witness Mr. Lawrence responded that historical drill holes that penetrate to uranium-bearing horizons in the Inyan Kara Group would have to pass through at least 500 feet of bentonitic shale in the overlying Graneros Group and that collapse and swelling of these shales would self-seal the holes.[356] Mr. Lawrence asserted that this self-sealing process occurs so rapidly in uncased

[350] NRC Staff Well Log Data Supplemental Testimony, Ex. NRC-158, at 17.
[351] Borehole Log Data Answering Testimony, Ex. APP-074, at 12.
[352] Moran Testimony, Ex. OST-001, at 19.
[353] LaGarry Supplemental Testimony, Ex. OST-029, at 3.
[354] Moran Testimony, Ex. OST-001, at 20.
[355] Oglala Sioux Tribe Statement of Position at 33.
[356] Lawrence Testimony, Ex. APP-037, at 26.

holes that it is often difficult to perform geophysical logging immediately after drilling.[357] As to whether large numbers of historical boreholes remain unplugged or were improperly abandoned, Mr. Lawrence responded that TVA and Powertech exploration holes were plugged with bentonite or cement grout in accordance with South Dakota state requirements that were in effect at the time these holes were drilled.[358] In response to Dr. LaGarry's interpretation of comments on driller's logs, Powertech witnesses maintained that (a) exploration boreholes are almost never cased and a notation to that effect is not relevant to whether or not the hole in question was adequately abandoned; (b) the Fall River and Chilson aquifers are indeed artesian at some locations on the site, but instead of indicating open communication with other aquifers, artesian conditions demonstrate these aquifers are confined; and (c) wooden fence posts are commonly inserted in previously plugged boreholes to mark their locations, and references to "broken steel" likely refer to drill pipe lost during construction of the borehole, and neither is relevant to whether or not the hole was properly plugged.[359]

With regard to the use of infrared imagery to detect leaking boreholes, Powertech and NRC Staff witnesses referred to a 2010 Powertech Technical Report RAI Response[360] that explains that CIR imagery detects anomalous areas of vegetation which, in the semi-arid Dewey-Burdock region, may indicate groundwater discharge at or near the surface. Powertech attributed the anomalous CIR signature in the southwest corner of the Burdock portion of the project area, known as "alkali flats," to improperly plugged boreholes, and asserted that if old boreholes caused similar discharges elsewhere on the site, they would have been readily detectable.[361] Powertech witnesses responded to Intervenors' assertion that the FSEIS lacks a discussion of how old boreholes will be located and abandoned by stating that existing historical records show the survey coordinates of old boreholes and that South Dakota regulations require that boreholes be plugged with bentonite or cement grout.[362] Specifically, Powertech witness Mr. Lichnovsky states that "the FSEIS describes Powertech's commitment to follow South Dakota regulations for plugging exploration holes and wells."[363]

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[357] *Id.*

[358] *Id.* at 25.

[359] Borehole Log Data Answering Testimony, Ex. APP-074, at 4-11.

[360] Ex. APP-016-C, Powertech, Revised Responses to [Technical Report] RAIs Dated May 28, 2010 at 201-10 (June 2011).

[361] *Id.*

[362] Borehole Log Data Answering Testimony, Ex. APP-074, at 5.

[363] *Id.* at 10 (citing FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.5.2).

4. Board Ruling

Because of the number of issues involved in this Contention, we set forth our conclusions separately on each specific technical issue related to fluid confinement.

a. General Confinement of the Overall Ore Zone

According to the FSEIS, the geologic confinement required for an ISL license is provided in the Dewey-Burdock area by the Morrison Formation below the ore-bearing units and the three formations of the Graneros Group above those units.[364] Aside from a statement questioning whether testing has been adequate to demonstrate the confining ability of the Morrison Formation, Intervenors offered little evidence relating specifically to these stratigraphic units.[365] Powertech witness Mr. Lawrence testified that pumping tests in the Chilson showed no response in the Unkpapa aquifer (below the Morrison Formation), which he maintained supported "a no-flow boundary for the Morrison Formation for modeling purposes."[366] Powertech witness Mr. Demuth, citing the FSEIS and license application, noted that the overlying Graneros Group is up to 550 feet thick and is present across the project area, except where eroded in the eastern edge of the site. In contrast, the Intervenors offered very little evidence to support their claim that the Graneros Group and Morrison Formation were not effective aquitards. Accordingly, we conclude the NRC Staff has given the confinement of the overall ore zone a hard look and agree with the conclusion in the FSEIS that the general confinement requirement for the Dewey-Burdock project has been met.

b. Continuity and Thickness of Fuson Shale

The FSEIS concludes that the continuous thickness of the Fuson Shale is based on the well logs of thousands of drill holes; representative examples of which indicate that the Fuson Shale can be clearly identified by its e-log signature. Intervenors' witnesses had access to these logs, but did not use them to challenge the continuity and thickness of the Fuson Shale. Accordingly, we conclude that Powertech has adequately shown that the Fuson Shale is continuous and has a minimum thickness of 20 feet, as indicated in the cross sections.

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[364] FSEIS, Ex. NRC-008-A-1, § 3.4.1.

[365] Moran Testimony, Ex. OST-001, at 27.

[366] Lawrence Answering Testimony, Ex. APP-066, at 10.

c. Leakage Shown by Pumping Tests

The question whether the NRC Staff's and Powertech's witnesses were justified in the conclusion that boreholes were the only cause for leakage through the Fuson Shale (indicated by pumping tests) is not fully answerable without discussing faulting and collapse structures. These are discussed below. Powertech and the NRC Staff witness testimony about differences in the potentiometric surfaces in paired wells in the Chilson and Fall River aquifers is compelling evidence that these aquifers are not freely connected by natural pathways. Further, that boreholes are known to exist in the vicinity of the test wells and reports of the earlier TVA pump tests both point to unplugged boreholes as the most likely cause of leakage. This indicates that, in the absence of compelling evidence for natural connectivity, we find the assumption that boreholes caused the leakage to be reasonable.

d. Rapid Groundwater Flow

Regarding the question of rapid horizontal flow, Powertech witness Mr. Lawrence testified that the average groundwater velocity in the Fall River and Chilson aquifers is approximately 6 to 7 feet per year (1.8 to 2.1 meters per year), which was consistent with the U.S. Geological Survey's independent estimate.[367] Intervenor witness Dr. LaGarry in contrast alleged the groundwater velocity in the ore zone was 35.5 meters per day. The Board was unable to find any support for Dr. LaGarry's claim. Accordingly, we concur with Mr. Demuth's analysis that Dr. LaGarry's groundwater velocity estimates are not supported by the record.

e. Faults, Fractures, and Joints

The Intervenors assert that faults and joints provide significant pathways for groundwater to migrate between aquifers. This is not simply a question of whether faults and joints are present, but rather whether they are large and open enough to produce a substantial breach in the confining layers, particularly in the Fuson Shale. The reports focusing on the TVA project in the Dewey-Burdock area are unequivocal in stating that faults and joints are present on the site.[368] Moreover, as correctly pointed out by Powertech and NRC Staff witnesses, although most of the drillers' notes presented as evidence by Intervenors are subject to interpretation, the driller's remark for drill hole TRR17 giving a specific description of a

[367] Lawrence Answering Testimony, Ex. APP-066, at 11.

[368] TVA Aquifer Analysis, Ex. OST-006, at 31; TVA Draft Environmental Statement, Ex. OST-009, at 50.

fault exposed in the wall of a mine pit seems credible.[369] On the other hand, none of the analyses of borehole logs performed by witnesses for Powertech, the NRC Staff, or the Intervenors have demonstrated that faults produced any significant displacements within the geophysically distinctive Fuson Shale. The fence diagrams based on logs from closely spaced drill holes that transect the purported faults identified by Dr. Moran provide particularly convincing evidence for a lack of significant faulting in that part of the project area.[370] Further, although Powertech and Staff witnesses are loath to acknowledge the existence of any faults or fractures in the area, Mr. Demuth noted in oral testimony that ISL operations have operated successfully in areas where faults cut the ore body, and that the presence of "small scale features in the orebody is not a deal killer."[371]

We therefore find that the evidence indicates that even though small faults and joints may be present in the project area, their presence does not support Intervenors' assertions that such faults produced significant offsets, much less that such faults and joints provide pathways for groundwater to migrate between aquifers.

f. Breccia Pipes

Intervenors' assertion that breccia pipes on the Dewey-Burdock property could provide connections between aquifers is less credible than the concerns about faulting. The satellite imagery offered in evidence by Dr. Moran was effectively refuted by both Mr. Lichnovsky's testimony that a field examination showed it was not a sinkhole,[372] and by the NRC Staff's analysis of e-logs from wells in the vicinity of the purported feature that demonstrated no disruption of the bedding.[373] Mr. Lichnovsky's analysis of the sketch on the drillers' log convincingly refuted Dr. LaGarry's interpretation that it depicted a sinkhole. In addition, Petrotek's conclusion, based on one of their numerical models, that groundwater flow through a breccia pipe would produce a mound in the potentiometric surface that would be easily detected if it were present, along with the totality of testimony and exhibits presented on the issue of breccia pipes, further convinces us that the FSEIS analysis on this issue is adequate.

[369] Ex. OST-038, TRR17 Driller Remarks.

[370] Ex. NRC-167, Location of Drill Hole Transects; Transect 1, Ex. NRC-168; Transect 2, Ex. NRC-169s.

[371] Tr. at 1079.

[372] Tr. at 1126.

[373] Ex. NRC-172, Fence Diagram of Resistivity Profiles for Selected Drill Holes (Oct. 14, 2014).

g. Boreholes

While all parties acknowledge that thousands of historical boreholes penetrate the Dewey-Burdock site, Intervenors assert that a large number remain open and could act as pathways for waters moving from the ore zones to adjacent aquifers. It is apparent that some boreholes on the site have not been adequately plugged, because leakage between formations was attributed to open boreholes in the TVA studies of the late 1970s, was again cited as the cause of leakage by Powertech and NRC Staff witnesses who analyzed the more recent pumping tests, and is cited as the cause for surface water in the "alkali flats" area. In light of these occurrences, it seems unlikely that all historic boreholes have been properly abandoned or have "self sealed."

Both Powertech and NRC Staff witnesses further assert that open boreholes do not pose a concern because Powertech will be required to locate any historical boreholes that were not properly abandoned and plug them with bentonite or cement grout. After considerable searching, we were able to locate the place in the record where "Powertech commits to properly plugging and abandoning or mitigating any . . . historical wells and exploration holes."[374] And, despite the NRC Staff's claim that because "there are a number of improperly plugged or abandoned boreholes at the Dewey-Burdock site, as a condition of its license Powertech must address these boreholes before beginning operations,"[375] we did not find any such explicit condition in the license.[376]

Therefore, the Board will amend license SUA-1600 with a similar condition that was included in the *Strata* license. License SUA-1600 shall be amended to include an additional license condition stating:

> Prior to conducting tests for a wellfield data package, the licensee will attempt to locate and properly abandon all historic drill holes located within the perimeter well ring for the wellfield. The licensee will document, and provide to the NRC, such efforts to identify and properly abandon all drill holes in the wellfield data package.

h. Artesian Flow

As noted by Consolidated Intervenor witness Dr. LaGarry, the record is replete with acknowledgments that artesian conditions exist at the proposed site.[377] The

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[374] Ex. APP-016-B, Powertech Application for NRC Uranium Recovery License, Technical Report RAI Responses at 31 (June 2011).

[375] NRC Staff's Post-Hearing Reply Brief at 26.

[376] Powertech Materials License, Ex. NRC-012.

[377] *See* Ex. APP-040-A, Application for NRC Uranium Recovery License Proposed Action Fall and Custer Counties South Dakota Environmental Report § 3.4.1.2 (Feb. 2009); SER (Revised) (Apr. 2014), Ex. NRC-134, §§ 2.3.3.3.1, 2.4.3.3.2; FSEIS, Ex. NRC-008-A-1, §§ 3.12.1.1, 3.12.2.

FSEIS notes that "anomalous (*i.e.*, high) gamma-ray readings identified in the southern part of the Dewey area in the area of an artesian well are likely due to discharging groundwater from the Inyan Kara aquifer."[378] Powertech witness Mr. Lawrence testified that flowing artesian conditions in the Fall River and Chilson aquifers throughout much of the license area are advantageous in identifying potential unplugged boreholes or wells, since surface discharge would be readily identifiable at these locations.[379]

Thus, there is no factual dispute as to whether there are artesian conditions at the site nor whether such conditions have the potential to spread fluids from the Inyan Kara aquifer to the surface. The NRC Staff addressed concerns about artesian flow at the surface by stating that Powertech is bound by license conditions to "limit the environmental impacts of any excursion associated with artesian flow" by monitoring for excursions twice monthly.[380] The NRC Staff also stated, "we took [artesian flow] into account when developing mitigation measures (*e.g.*, license conditions) and assessing the environmental impacts of the Dewey-Burdock Project."[381] NRC Staff witnesses Mr. Prikryl and Mr. Lancaster testified that the presence of artesian wells in and around the license area is documented in FSEIS § 4.5.2.1.1.2.2.[382] NRC Staff witnesses Mr. Prikryl and Mr. Lancaster also testified that the FSEIS documents Powertech's procedures to mitigate potential impacts regarding flowing artesian wells, including removing all domestic wells within the project area from private use prior to beginning operations, removing all stock wells within 0.25 mile of any wellfield from private use prior to operation of that wellfield, and monitoring all domestic, livestock, and crop irrigation wells within 2 kilometers of the boundary of any wellfield during operations.[383] Mr. Prikryl and Mr. Lancaster also testified that Powertech's routine excursion monitoring program, required by LC 11.5, and Powertech's requirement to maintain a net inward hydraulic gradient, required by LC 10.7, will further minimize potential impacts from flowing artesian conditions.[384]

Powertech and the NRC Staff convincingly note that the very existence of artesian conditions in the ore zone aquifers means that they are largely confined, and that in the absence of significant natural pathways, such as faults and breccia pipes, the only way the artesian conditions can result in a transfer of water out of the ore zone aquifers is via unplugged boreholes. Therefore, requiring boreholes

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[378] FSEIS, Ex. NRC-008-A-1, § 3.12.1.1.

[379] Lawrence Testimony, Ex. APP-037, at 28.

[380] NRC Staff's Answering Testimony, Ex. NRC-175, at 6-7.

[381] *Id.* at 7.

[382] NRC Staff's Rebuttal Testimony, Ex. NRC-151, at 39; *see also* NRC Staff's Answering Testimony, Ex. NRC-175, at 6.

[383] *See* NRC Staff's Answering Testimony, Ex. NRC-175, at 6.

[384] *See* NRC Staff's Rebuttal Testimony, Ex. NRC-151, at 39-40.

to be located and properly abandoned should largely resolve any threats posed to either surface water or the shallow aquifers by the existing artesian conditions.

With the condition that unplugged boreholes be located and properly abandoned, the FSEIS and the record in this proceeding include adequate hydrogeological information to demonstrate the ability to contain fluid migration and assess potential impacts to groundwater. We therefore find for Powertech and the NRC Staff on Contention 3.

D. Contention 4: The FSEIS Fails to Adequately Analyze Groundwater Quantity Impacts

1. Legal Standards

In this Partial Initial Decision the Board reviews the NRC Staff's FSEIS under the NEPA hard look standard.[385]

2. Parties' Positions

In Contention 4[386] the Oglala Sioux Tribe alleges that the FSEIS fails to comply with NEPA's hard look requirement because it inadequately analyzes groundwater quantity impacts of the ISL project. Specifically, the Oglala Sioux Tribe argues that "the FSEIS presents conflicting information on groundwater consumption such that the water consumption impacts of the project cannot be accurately evaluated."[387] The Oglala Sioux Tribe maintains that these consumption impacts and "the underlying basis for the quantity of water lost due to contamination, reverse osmosis, evaporation, and deep disposal were never established" in the FSEIS, or in the evidentiary record of this hearing.[388]

The Oglala Sioux Tribe also characterizes the FSEIS as improperly relying on South Dakota Department of Environment and Natural Resources (SDDENR) findings that "annual water consumption will not exceed the recharge rates of either the Madison or Inyan Kara aquifers."[389] The Oglala Sioux Tribe contends that non-NEPA documents cannot satisfy NEPA, except when tiered with other documents that must have both been prepared within a NEPA process and address

[385] This standard is fully explained above in Part II.B of this Partial Initial Decision.
[386] LBP-14-5, 79 NRC at 401.
[387] Oglala Sioux Tribe Post-Hearing Initial Brief at 56.
[388] *Id.* at 57.
[389] Tr. at 1303.

the specific proposed action.[390] The Oglala Sioux Tribe does not believe that the SDDENR permits in this proceeding are eligible for NEPA tiering.

Powertech argues that project water usage is properly quantified in the FSEIS, that the water quantity impacts to local wells have been adequately analyzed, and that the project water balance is adequate and appropriate for its intended purpose.[391] The NRC Staff argues that both CEQ guidance and NRC practice allow the NRC Staff to incorporate other analyses and information relevant to NEPA decisionmaking, including those prepared by other state and federal agencies.[392] Specifically, although the NRC Staff acknowledges consideration of the SDDENR water permit applications and EPA groundwater injection regulations, the NRC Staff asserts it conducted independent analyses.[393]

3. Summary of Key Evidence

The Oglala Sioux Tribe relies on Dr. Moran's testimony that Powertech will use and contaminate 4.5 billion gallons of water per year from the Inyan Kara aquifer and up to 290 million gallons of water per year from the Madison aquifer.[394] Although Dr. Moran does acknowledge that the "consumptive use" figure of 2% listed in the FSEIS will be relatively small, he opined that this estimate ignored the water that will be contaminated and lost by evapotranspiration, rendering it "no longer available for present or future uses within the exempted aquifer zone."[395] Dr. Moran also testified that based on the limited testing and modeling done by the NRC Staff, the "long-term water level drawdown in either the Madison or Inyan Kara are semi-quantitative, at best."[396] Dr. Moran criticized the purported water balance shown in FSEIS Figure 2.1-14[397] because it is based only on flow rates rather than total volumes. In Dr. Moran's estimation, the FSEIS failed to consider the basic components of a water balance by excluding "detailed, measured data for volumes of water entering the system and losses (*e.g.* volumes of ground water available in the various aquifers, evaporation from land

[390] Oglala Sioux Tribe Post-Hearing Initial Brief at 58-59. In support of its position that an FSEIS cannot rely on non-NEPA documents, the Oglala Sioux Tribe cites *South Fork Band Council v. U.S. Department of the Interior*, 588 F.3d 718, 726 (9th Cir. 2009).

[391] Powertech Initial Findings of Fact and Conclusions of Law at 113-20.

[392] NRC Staff's Response to Post-Hearing Order (Jan. 9, 2015) at 18-19.

[393] *Id.* at 19-22.

[394] Moran Testimony, Ex. OST-001, at 26.

[395] *Id.* at 27.

[396] *Id.*

[397] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.4, Figure 2.1-14.

application facilities, volumes under-going Underground Injection Control, etc.), and fail[ing] to calculate an actual balance."[398]

Powertech's witness Doyl Fritz[399] provided detailed written testimony that the FSEIS did provide a water balance for the project that included "the typical water consumption estimates for the Inyan Kara and Madison aquifers during each project phase (production, production/restoration, restoration) and for each wastewater disposal option."[400] Mr. Fritz testified that Powertech has submitted applications to the SDDENR for water appropriation permits from the Inyan Kara and Madison aquifers, that information from the applications and the SDDENR's review and recommended approval of those applications is provided in the FSEIS, and that the "SDDENR has recommended approval on the basis that sufficient water is available, the proposed withdrawals will not exceed average annual recharge, and there is not anticipated to be harm to nearby water users."[401] Further, Mr. Fritz testified that "Powertech will be required by South Dakota water right permits to not adversely affect existing water rights or domestic wells."[402]

With detailed reference and specific citations to the FSEIS and other items in the record, Powertech witness Mr. Demuth testified (1) to the location (in the record) of the water balance and its relationship to groundwater use;[403] (2) how the water balance was developed based on NUREG 1569 guidance;[404] (3) the

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[398] Moran Testimony, Ex. OST-001, at 26-27 (emphasis omitted).

[399] Ex. APP-047, Doyl M. Fritz Curriculum Vitae.

[400] Ex. APP-046, Written Testimony of Doyl Fritz (June 20, 2014) at 8 [hereinafter Fritz Testimony, Ex. APP-046]. In discussing the water balance, Mr. Fritz cited RAI Responses, Ex. APP-016-B at 68-73, which appears to be identical to FSEIS Figure 2.1-14. FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.4, Figure 2.1-14. Dr. Moran's response characterizes this as an "attempt to identify materials in the hearing record that could be construed as part of a water balance. [However], [t]he comments of Mr. Fritz do not change my opinions or the basis of my opinion that the FSEIS does not contain a water balance." Ex. OST-018, Written Rebuttal Testimony of Dr. Robert E. Moran (July 15, 2014) at 7-8 [hereinafter Moran Rebuttal Testimony, Ex. OST-018].

[401] Fritz Testimony, Ex. APP-046, at 5; *see also* FSEIS, Ex. NRC-008-A-2, § 4.5.2.1. At the hearing, Dr. Moran did not dispute the FSEIS's summary of the SDDENR's conclusions, although he did add that he did not "see any of the backup for defending those conclusions." Tr. at 1150-52.

[402] Fritz Testimony, Ex. APP-046, at 10; *see also* Ex. APP-028, SDDENR, Report to Chief Engineer on Powertech Water Permit Application at 16 (Nov. 2, 2012) [hereinafter SDDENR Report on Water Permit Application, Ex. APP-028].

[403] Demuth Testimony, Ex. APP-013, at 18.

[404] *Id.* at 19. Mr. Demuth's rebuttal testimony further commented that the water balance in the FSEIS is appropriate and "in accordance with NRC regulatory guidance in NUREG-1569 Section 3.1.3 and federal regulations in 10 CFR 40.32(c) and 40.41(c)," and "the NRC Staff found that the modeling effort was sufficient to 'enhance understanding of the Fall River and Chilson aquifer systems with respect to: regional and local flow patterns; recharge and discharge boundaries; and overall water budget.'" Ex. APP-065, Answering Testimony of Hal Demuth at 4-5 (July 15, 2014).

workings of the water balance;[405] (4) how "measured data" cannot be included in a water balance prior to the commencement of facility operations;[406] (5) how any water loss due to evaporation will occur from water temporarily stored in ponds prior to disposal, which is effectively accounted for in the water balance diagram in streams I and N;[407] (6) the relatively small projected impact of facility operations on local wells;[408] (7) water level and flow rate data for existing wells;[409] and (8) measures to protect existing wells during operation.[410] Powertech witness Mr. Lawrence also added that ISL:

> actually does not require much water relative to many other types of uses (including irrigation), and there are many incentives for Powertech to minimize water withdrawal, not the least of which is to minimize the amount of water that must be disposed by land application or deep well injection, both of which are relatively expensive.[411]

NRC Staff witnesses Mr. Lancaster and Mr. Prikryl jointly filed initial written testimony on Contention 4.[412] Mr. Lancaster and Mr. Prikryl (1) identified specific locations in the record where water consumption was discussed;[413] (2) defined a "water balance" and its significance and identified its location in the record for the Dewey-Burdock site as well as local and regional balances for the Inyan Kara and Madison aquifers;[414] (3) identified the results of numerical modeling used to predict drawdown in the Inyan Kara;[415] (4) identified the section of the FSEIS where consumptive groundwater use is discussed;[416] (5) identified the sections of

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[405] Demuth Testimony, Ex. APP-013, at 19-20.

[406] *Id.* at 20.

[407] *Id.* at 19-20; *see also* Tr. at 1146-47. Dr. Moran responds that "Mr. Demuth wrongly asserts that water lost via evaporation from the waste ponds has no effect on the volumes of water used by the D-B project. Mr. Demuth wrongly asserts that my expert opinion was 'based on a false premise — that water loss through evaporation would somehow increase the overall water consumption rate.' My testimony is not based on the increase in consumption rate. My testimony is based on the conclusion that such evaporation and any other categories of water loss not accounted for in the FSEIS estimate will increase the total volumes of water used by the D-B project." Moran Rebuttal Testimony, Ex. OST-018, at 7.

[408] Demuth Testimony, Ex. APP-013, at 20-22.

[409] *Id.* at 22-23.

[410] *Id.* at 23.

[411] Lawrence Testimony, Ex. APP-037, at 45.

[412] NRC Staff's Initial Testimony, Ex. NRC-001.

[413] *Id.* at 65.

[414] *Id.* at 65-68. At the hearing, Mr. Prikryl confirmed that "water taken from the Inyan Kara and injected in deep wells would be counted for [in streams] I and N." Tr. at 1147-48.

[415] NRC Staff's Initial Testimony, Ex. NRC-001, at 68-69.

[416] *Id.* at 69-71.

the FSEIS describing wastewater treatment, disposition, and the applicable water quality standards;[417] (6) identified the location in the record of the discussion and analysis of the facility impacts on local (<2 kilometers) and surrounding domestic and livestock groundwater wells;[418] (7) explained that Powertech cannot provide facility-specific "measured data" in the water balance until the facility becomes operational;[419] (8) discussed the SDDENR's analysis and approval of the groundwater appropriation for the facility;[420] and (9) discussed the use of flow volumes versus flow rates (volume per time) in the water balance.[421]

4. Board Ruling

We find that based upon a reasonably comprehensive analysis, the SDDENR has recommended approval of water rights permits limiting Powertech to net withdrawals of 274.2 acre-feet per year (89.3 million gallons per year) from the Inyan Kara aquifer and 888.8 acre-feet per year (290 million gallons per year) from the Madison aquifer. SDDENR's recommended approval is based on the conclusion that withdrawals at the approved rates will not result in annual withdrawals that exceed the annual average recharge to the aquifers, that there is a reasonable probability that unappropriated water is available in the aquifers to supply the proposed appropriation, and there is a reasonable probability that the withdrawals proposed in the application can be made without unlawful impairment of existing water rights or domestic wells. Although there was significant information pertaining to the SDDENR water rights applications and permits and their bases in the record (and therefore subject to challenge under NEPA), this information was not challenged by the Intervenors.

In addition, we find that although the NRC Staff relied on the SDDENR water rights applications and permits for the Inyan Kara and Madison aquifers to a significant extent in determining that the environmental impacts of the proposed project to groundwater were small,[422] the NRC Staff did not place complete or undue reliance on the SDDENR analysis in making that determination.[423] In addition to numerous references to the NRC Staff's generic assessments of the impacts to groundwater, including consumptive use, of ISL projects in

[417] *Id.* at 71-73.
[418] *Id.* at 73-76.
[419] *Id.* at 77-78.
[420] *Id.* at 78.
[421] *Id.* at 79.
[422] FSEIS, Ex. NRC-008-A-2, § 4.6, Table 4.5-2.
[423] Based on the Board's analysis, Intervenors' allegations regarding *South Fork Band Council* and NEPA tiering do not accurately portray how water quantity conclusions in the FSEIS were reached.

general,[424] there are also many examples in the FSEIS of the NRC Staff's analysis of consumptive use and groundwater quantity impacts above and beyond the SDDENR's water rights permit application.[425]

At the hearing, Dr. Moran acknowledged that he could not identify another NRC-led EIS that included the kind of detailed water balances to which he had alluded in his initial testimony.[426] Further, in response to questions on FSEIS Figure 2.1-14,[427] while maintaining that there were some missing items such as water loss from evaporation and water pumped from the Inyan Kara and injected into other aquifers,[428] Dr. Moran acknowledged that he had not gone through the flows to see if they balanced. In contrast, both Powertech and NRC Staff witnesses testified with detailed reference and specific citations to the FSEIS and other items in the record on the workings and adequacy of the water balance. As a result, the Board finds that FSEIS Figure 2.1-14[429] and the accompanying text is a reasonable and appropriate water balance, which accounts for all significant project water uses, including (in effect) water lost to evaporation.

Accordingly, we conclude the NRC Staff took the required hard look at the relevant groundwater quantity impacts and find for Powertech and the NRC Staff on Contention 4.

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[424] FSEIS, Ex. NRC-008-A-2, § 4.5.2.

[425] For example, the NRC Staff considered the "results of numerical groundwater simulations . . . [in assessing] the potential impact to shallow local aquifers and domestic and livestock wells from consumptive water use during the construction phase of the proposed project." FSEIS, Ex. NRC-008-A-2, § 4.5.2.1.1.1. The NRC Staff also "analyzed the hydrogeologic characteristics of the Fall River and Chilson aquifers (*i.e.,* formation thicknesses and potentiometric surfaces)" in determining that water consumptive use during operations "will have a SMALL impact on nearby wells located in the Fall River and Chilson aquifers." FSEIS, Ex. NRC-008-A-2, § 4.5.2.1.1.2.2. The NRC Staff also relied on Powertech's commitment to appropriately handling wells in and near the project boundaries in concluding that "the overall environmental impacts on local aquifers, production aquifers, and domestic and livestock wells from consumptive use during operations for the Class V injection well disposal option at the proposed project will be SMALL." FSEIS, Ex. NRC-008-A-2, § 4.5.2.1.1.2.2. The NRC Staff "reviewed the applicant's numerical groundwater model and calibration, and it determined that the model was appropriately developed and sufficiently calibrated." *Id.* Finally, we note that in the Safety Evaluation Report the NRC Staff indicated it "constructed a simple 3-layer model to study the effects of a large withdrawal from the Madison Formation" and concluded that "the proposed maximum Madison withdrawals at the Dewey-Burdock project do not appear to affect water supplies in the City of Edgemont, South Dakota." SER (Revised) (Apr. 2014), Ex. NRC-134, § 3.1.3.5. We did not find reference to that study in the FSEIS.

[426] Tr. at 1143.

[427] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.4, Figure 2.1-14.

[428] Tr. at 1143-44.

[429] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.4, Figure 2.1-14.

E. Contention 6: The FSEIS Fails to Adequately Describe or Analyze Proposed Mitigation Measures

In Contention 6[430] Intervenors assert that "the FSEIS violates 10 C.F.R. §§ 51.10, 51.70 and 51.71, and [NEPA] and implementing regulations by failing to include the required discussion of mitigation measures."[431] Specifically, Intervenors contend that the NRC Staff violated NEPA by (1) not adequately discussing or evaluating mitigation measures that are incorporated in the FSEIS, and (2) wrongly deferring the development of further mitigation measures until after the FSEIS and Record of Decision were issued. We consider both of these concerns in turn.

1. Legal Standards

Mitigation under NEPA is defined as (a) avoiding an impact by not taking an action, (b) minimizing an impact by limiting the degree or magnitude of an action, (c) rectifying the impact of an action by repairing, rehabilitating, or restoring the impacted area, (d) reducing or eliminating the impact over time by preservation and maintenance operations, or (e) compensating for the impact or replacing or substituting resources or environments.[432] For a project requiring a NEPA analysis, the statute itself,[433] CEQ regulations,[434] NRC implementing regulations,[435] and Supreme Court precedent[436] require agencies to discuss and consider how possible environmental effects can be mitigated. Merely listing possible mitigation options does not satisfy NEPA.[437] Though mitigation measures must be discussed in an EIS, the statute "does not guarantee that federally approved projects will have no

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[430] LBP-14-5, 79 NRC at 401.

[431] Oglala Sioux Tribe Statement of Position at 27. Consolidated Intervenors adopt the Contention 6 arguments forwarded by the Oglala Sioux Tribe. Consolidated Intervenors' Opening Statement at 9 (July 7, 2014) [hereinafter Consolidated Intervenor Statement of Position].

[432] 40 C.F.R. § 1508.20.

[433] NEPA documents must include "a detailed statement by the responsible official on . . . any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C)(ii).

[434] "The environmental impacts of the proposal and the alternatives . . . shall . . . include appropriate mitigation measures." 40 C.F.R. § 1502.14. The scientific and analytical section backing up the proposal and alternatives section must also discuss any "means to mitigate adverse environmental impacts" not previously covered. 40 C.F.R. § 1502.16(h). An agency's Record of Decision also must include a concise discussion of mitigation measures. 40 C.F.R. § 1505.2(c).

[435] 10 C.F.R. Part 51.

[436] "A reasonably complete discussion of possible mitigation measures" must be included in a NEPA document, to allow the agency and the public a chance to "properly evaluate the severity of the adverse effects." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989).

[437] *Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 476 (9th Cir. 2000).

adverse impacts."[438] NEPA does not "demand the presence of a fully developed plan that will mitigate environmental harm before an agency can act."[439]

Judicial precedent indicates that when the adequacy of an EIS mitigation strategy is challenged, the determining issue is whether the agency took a sufficiently hard look at environmental consequences, and ensured that its decision was supported by a completely informed record.[440] A court may not substitute its own judgment for that of an agency, and agencies are not constrained by NEPA to select only "the most environmentally benign option."[441] Courts decide whether a mitigation plan was adequately or inadequately discussed, but the line between these two options "is not well defined."[442] Here, in judging whether the NRC Staff took the NEPA-mandated hard look in licensing Powertech's ISL facility, the Board reviewed the proposed mitigation programs to ensure that "sufficient detail" was provided on mitigation measures to show a fair agency evaluation of mitigation and environmental consequences, and that the NRC Staff has not "ignored or minimized pertinent environmental effects."[443]

At the evidentiary hearing in this proceeding, the Oglala Sioux Tribe did not offer witnesses in support of Contention 6. Consolidated Intervenors did not adopt Contention 6, which was advanced by the Oglala Sioux Tribe, and so could not present their own evidence or witnesses.[444] But, as an admitted party to the proceeding, Consolidated Intervenors were allowed to make arguments and otherwise participate as a party in the proceeding.[445] Powertech offered witnesses Hal Demuth, Errol Lawrence, and Doyl Fritz. The NRC Staff offered witnesses Haimanot Yilma, Kellee Jamerson, and James Prikryl.

2. Parties' Positions on Lack of Adequate Discussion of Mitigation Measures

The Oglala Sioux Tribe argues that each proposed mitigation measure "must

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[438] *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, NM 87313), CLI-06-29, 64 NRC 417, 429 (2006).

[439] *Robertson,* 490 U.S. at 353; *see also Hydro Resources,* CLI-06-29, 64 NRC at 427.

[440] *See Theodore Roosevelt Conservation Partnership v. Salazar,* 616 F.3d 497, 517 (D.C. Cir. 2010); *see also Claiborne,* CLI-98-3, 47 NRC at 88.

[441] *Claiborne,* CLI-98-3, 47 NRC at 88.

[442] *Okanogan Highlands Alliance,* 236 F.3d at 476.

[443] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431-32 (2003).

[444] Licensing Board Order (Ruling on Motions in Limine: Motions to Strike and for Cross-Examination) (Aug. 1, 2014) at 7.

[445] *Id.* at 5. Consolidated Intervenors adopted the evidence, authority, and argument of the Oglala Sioux Tribe. Consolidated Intervenor Statement of Position at 9.

be detailed with specific description, supporting data, and analysis of process and effectiveness;"[446] and that NEPA requires an agency to fully review whether the mitigation strategy will be effective.[447] Intervenors allege that mitigation measures regarding Powertech's application have not been discussed with sufficient detail to ensure that environmental consequences have been fairly evaluated.[448] While the Oglala Sioux Tribe recognizes that impacts need not actually be mitigated to grant Powertech an NRC license, the Oglala Sioux Tribe contends that the FSEIS discussion of mitigation measures simply listed the measures and asserted they might be successful, "with no scientific evidence or analysis to support those claims," and that the FSEIS did not adequately assess the measures' effectiveness in the context of the proposed action and proposed alternatives.[449]

In a general sense, the Oglala Sioux Tribe alleges that the NRC Staff's "reliance on license conditions to mitigate impacts" without discussion of their effectiveness violated NEPA requirements.[450] Specifically, the Oglala Sioux Tribe claims "no discussion or analysis is provided" on the effectiveness of identifying and plugging abandoned holes in the permit area.[451] The Oglala Sioux Tribe also asserts that the FSEIS does not assess the plan to review groundwater restoration for only 12 months without support for this time period or analyzing any alternative time periods.[452] The Oglala Sioux Tribe also faults a proposed, but allegedly unevaluated, monitoring well network "because leakage may occur through the Fuson Shale and draw-down induced migration of radiological contaminants from abandoned open pit mines in the Burdock area."[453] Various other specific examples of insufficient analysis alleged by the Oglala Sioux Tribe include references to BLM guidelines, sound abatement controls, evaporation pond impacts, and groundwater mitigation and restoration.[454]

In response, the NRC Staff and Powertech defended the adequacy of the FSEIS discussion of mitigation measures. The NRC Staff argues that while the

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[446] Oglala Sioux Tribe Statement of Position at 38.

[447] *Id.* at 28.

[448] Oglala Sioux Tribe Statement of Position at 30; Consolidated Intervenor Statement of Position at 9.

[449] Oglala Sioux Tribe Statement of Position at 30-31.

[450] Tr. at 1197-98. The Oglala Sioux Tribe alleged that the mitigation discussion consisted of a chart simply listing "a series of proposed mitigation measure[s], with no elaboration or other analysis." Oglala Sioux Tribe Statement of Position at 37. This claim seems to have been abandoned in later briefing following explanations from the NRC Staff that the chart in FSEIS Chapter 6, titled "Mitigation," was simply a compilation of mitigation measures, the specifics of which are detailed across other chapters of the FSEIS.

[451] Oglala Sioux Tribe Statement of Position at 33.

[452] *Id.*

[453] *Id.* at 33-34.

[454] *Id.* at 35-36.

effectiveness of mitigation measures must be discussed, this discussion need not be highly detailed.[455] The NRC Staff gives several examples of the level of detail it provided in describing mitigation measures, which it asserts was sufficient. In one example, the NRC Staff quotes the FSEIS as saying, "impacts of surface land disturbance will be minimized by mitigation measures, including concurrently reclaiming and revegetating surface disturbed areas, limiting construction of new access roads, and restricting vehicular traffic in wellfields and land application areas."[456] While the NRC Staff admits that the Oglala Sioux Tribe provided an accurate recitation of NEPA mitigation requirements, the NRC Staff asserts that it met these requirements, and fully considered the effectiveness of mitigation measures.

Powertech also defends the NRC Staff's work in analyzing mitigation measures in the FSEIS. Powertech contends that mitigation measures in the SER, along with those in the FSEIS, must be taken into account, as the Record of Decision incorporates the findings of both documents.[457] Powertech further contends that all plans were reviewed and approved by the NRC Staff, and that they are consistent with past practices at ISL facilities.[458] Regarding specific mitigation measures, Powertech represents that for those associated with historical mine pits and groundwater restoration, the FSEIS does outline a variety of mitigation measures that will be approved before operation.[459] Powertech also defends the avian and wildlife mitigation plans as proposing specific mitigation strategies developed based on expert recommendations.[460]

3. Board Ruling on Lack of Adequate Discussion of Mitigation Measures

After a thorough review of the Record of Decision, FSEIS, and associated documents, the Board finds that the NRC Staff's discussion and evaluation of mitigation measures is adequate. The Oglala Sioux Tribe correctly claims that mitigation measures must provide a specific description, supporting data, and an analysis of process and effectiveness, but the Board concludes that the NRC Staff has adequately satisfied this burden. The Oglala Sioux Tribe's arguments overlook extensive mitigation analysis in the FSEIS. Specifically, Chapter 4 of the FSEIS contains sufficiently detailed information on mitigation measures of Powertech's

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[455] NRC Staff Statement of Position at 43-44.

[456] *Id.* at 45.

[457] Powertech Statement of Position at 51.

[458] *Id.* at 54.

[459] *Id.* at 52.

[460] *Id.* at 55-56 (referencing "limiting noise and vehicular traffic and wildlife access to wastewater ponds, adherence to timing and distance restrictions from appropriate agencies to protect active raptor nests during breeding seasons, and following appropriate land application requirements").

permitted activities.[461] The NRC Staff has not ignored the mitigation of potential environmental effects associated with this ISL licensing action. Rather, the FSEIS provides extensive mitigation discussions in which risks to the environment have been thoroughly analyzed and license conditions imposed to mitigate those risks.

The NRC Staff's final NEPA document, the Record of Decision, provides the mandated references to mitigation measures detailed in the FSEIS.[462] The Record of Decision also states that license condition 9.2 binds Powertech to all the "commitments, representations, and statements includ[ing] the mitigation measures and monitoring programs described" throughout its license, the Record of Decision, and the FSEIS.[463] From surface disturbance,[464] facility construction,[465] operation,[466] to decommissioning,[467] the NRC Staff discusses and analyzes substantial mitigation strategies. Regarding issues outside of the NRC's expertise, it is appropriate for the agency to incorporate the mitigative controls incorporated in permits granted by other expert agencies. The Board finds that the NRC Staff appropriately relied on restrictions present in other federal and state permits as mitigation measures.[468] In *South Fork Band Council v. BLM*, 588 F.3d at 726, the Ninth Circuit rejected the Bureau of Land Management's argument that some "impacts need not be evaluated because the Goldstrike facility operates pursuant to a state permit under the Clean Air Act." Here, however, the NRC Staff did not

[461] For example, regarding the impact on geology and soils, mitigation strategies are discussed in the FSEIS in sections 4.4 and 4.4.1.2. Mitigation strategies are also discussed and analyzed regarding water resources, ecological resources, air quality, noise, historical and cultural resources, visual and scenic resources, socioeconomics, environmental justice, public and occupational health and safety, and waste management.

[462] Ex. NRC-011, Record of Decision for Dewey-Burdock Project at 3-4 (Apr. 8, 2014) [hereinafter Record of Decision, Ex. NRC-011]; *see also* 10 C.F.R. § 51.103(a)(4) (requiring the Record of Decision to summarize any license conditions and monitoring programs adopted in connection with mitigation measures).

[463] Record of Decision, Ex. NRC-011, at 4.

[464] Revegetation and restricting vehicular traffic are discussed in the FSEIS, Ex. NRC-008-A-2, § 4.2.1.2.

[465] The plant will be constructed on concrete slabs with protective berms to mitigate and contain accidental spills. FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.2.

[466] Class V deep well injection permit requirements were, in part, considered by the NRC as mitigation measures during operation of the ISL facility. FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.2.

[467] Mitigation measures to control erosion, stormwater runoff, sedimentation, and National Pollutant Discharge Elimination System permit requirements were cited to "ensure that stormwater runoff will not contaminate surface water." FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.3.

[468] For instance, Powertech must comply with EPA injection well permits (FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.2) and SDDENR SWMP (FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.2) and National Pollutant Discharge Elimination System permit (FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.2.1), and U.S. Army Corps of Engineers section 404 permitting requirements must be complied with before conducting work in project area wetlands (FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.2.1).

disregard impacts considered under other agencies' permits. Instead, the FSEIS fully evaluated the impacts and mitigation strategies detailed under other permits. The NRC Staff also adequately considered the impacts to birds and wildlife in the FSEIS, not just in associated documents.[469] The Board thus finds the NRC Staff adequately considered the effectiveness of mitigation measures.[470]

4. Parties' Positions on Developing Mitigation Measures After FSEIS Completion

The Oglala Sioux Tribe also alleges that the NRC Staff has violated NEPA by relying on "future, as yet-unsubmitted, mitigation to prevent/mitigate adverse impacts" from Powertech's ISL operation.[471] Regarding cultural resources, the Oglala Sioux Tribe alleges that mitigation for cultural resources impacts should have been included in the FSEIS, and not "deferred into a post-FSEIS programmatic agreement phase."[472] Other future mitigation plans the Oglala Sioux Tribe labels as nothing more than "plans to make plans at some point in the future" including the proposed monitoring well network, historical well hole plugging, and wildlife protections and monitoring.[473] Consolidated Intervenors also claim that the draft avian monitoring and mitigation plan should be completed and incorporated into the FSEIS.[474] In sum, the Intervenors allege that any mitigation measures developed outside the FSEIS do not fulfill the agency's responsibility under NEPA to consider mitigation measures.[475]

The NRC Staff defends its NEPA cultural resources analysis by stressing that although the FSEIS was issued before the Programmatic Agreement was finalized,

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[469] FSEIS, Ex. NRC-008-A-2, § 4.6.1.1.1.1.2. Associated Powertech documents expand on the plans and commitments referenced in the FSEIS. Ex. APP-071, 2013 Wildlife Monitoring Report (July 2, 2014); Ex. OST-023, Draft Avian Monitoring and Mitigation Plan (Sept. 2013); Ex. OST-022, BLM Correspondence (July 8, 2014); Ex. OST-024, January 10, 2014 USFWS Take Permit Application (Jan. 10, 2014).

[470] For example, based explicitly on the implementation of mitigation measures, the NRC Staff found that the impact of the preferred Class V injection well disposal would be SMALL, and that the impact of consumptive use on local aquifers, production aquifers, and domestic and livestock wells would also be SMALL. FSEIS, Ex. NRC-008-A-2, §§ 4.5.2.1.1.2.1, 4.5.2.1.1.2.2. The NRC Staff also found that groundwater quality impacts to the production and surrounding aquifers as a result of ISL operations for the Class V injection well disposal option would be SMALL. FSEIS, Ex. NRC-008-A-1, § 4.5.2.1.1.2.2.

[471] Oglala Sioux Tribe Statement of Position at 28.

[472] Tr. at 1197; *see also* Oglala Sioux Tribe Statement of Position at 32.

[473] Oglala Sioux Tribe Statement of Position at 33-34. The Oglala Sioux Tribe alleges that even though the avian monitoring and mitigation plan was submitted before the FSEIS was finalized, it was not discussed in the FSEIS. Tr. at 1198.

[474] Consolidated Intervenor Statement of Position at 10.

[475] Tr. at 1200-01.

the Record of Decision was not issued until after the Programmatic Agreement was finalized.[476] According to the NRC Staff, it separated its NHPA and NEPA reviews in November 2013 to lessen delays in issuing the FSEIS.[477] The NRC Staff indicated the FSEIS was nearly complete at that time, but the NHPA § 106 process was not. But the NRC Staff declared that it would not take any licensing action until the Programmatic Agreement was completed, so tribal comments on the Programmatic Agreement were considered before a Record of Decision was released.[478] The NRC Staff also asserts that the continued development of mitigation measures after the completion of the NEPA process is fully supported by NRC NEPA precedent.[479]

Powertech also defends the timing of the NRC Staff's treatment of mitigation measures, claiming that an ongoing development of mitigation items is a necessary process.[480] Powertech also states that the Record of Decision and license include mitigation measures reviewed in the SER, and not just the FSEIS.[481] Regarding monitoring and mitigation measures for groundwater, Powertech claims that NRC regulations establish a system in which post-license pump tests are necessary in order to develop the appropriate mitigation techniques depending on the presence or absence of abandoned boreholes.[482] Powertech witness Mr. Demuth offered testimony that monitor well networks will be established for every wellfield, as well as a general monitoring well network for the Fall River aquifer.[483] Powertech also stressed that wildlife impacts will be mitigated by specific measures outlined in the FSEIS.[484] While the FSEIS mentions the avian monitoring and mitigation plan that Powertech is developing, this plan is required by South Dakota rules, not NRC rules.[485] Therefore Powertech contends that the avian monitoring and mitigation plan did not need to be finalized before issuance of the Record of Decision.

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[476] NRC Staff Statement of Position at 47.

[477] Ex. NRC-070, Letter from Kevin Hsueh, Chief, Environmental Review Branch, NRC, to John M. Fowler, Executive Director, Advisory Council on Historic Preservation at 1.

[478] *Id.* at 2.

[479] NRC Staff Statement of Position at 49; *see also* NRC Staff's Initial Testimony, Ex. NRC-001, at 82-83.

[480] Powertech Statement of Position at 50 (claiming that mitigation measures cannot be implemented pre-license issuance).

[481] *Id.* at 51.

[482] *Id.* at 53.

[483] Demuth Testimony, Ex. APP-013, at 28-29.

[484] Powertech Statement of Position at 55.

[485] *Id.* at 56.

5. Board Ruling on Developing Mitigation Measures After FSEIS Completion

To justify and memorialize a permitting decision, agencies must release a Record of Decision at the conclusion of every EIS process.[486] The release of an FSEIS does not mark the completion of the NEPA review process. Here, the Programmatic Agreement was not included in the FSEIS, but the FSEIS does explain that a separate Programmatic Agreement was yet to be released.[487] The FSEIS further explains that mitigation measures adopted in the Programmatic Agreement "could reduce an adverse impact to a historic or cultural resource."[488] In *Hydro Resources*, CLI-99-22, 50 NRC at 14, the Commission approved the NRC Staff completion of some NHPA documents after the EIS process was complete, but before the license was issued.[489] Therefore, the Board finds that the NRC Staff completing the Programmatic Agreement after the FSEIS was released, but before the issuance of the Record of Decision or the license, adequately satisfied NEPA. The NRC Staff's decision to grant Powertech License SUA-1600 necessarily incorporated the results of, and comments on, the Programmatic Agreement into the decision.[490]

The Board also finds that the other mitigation measures designated in the FSEIS for post-licensing development, including monitoring well networks, historical well hole plugging, and wildlife protections and monitoring, have been adequately explained and satisfy NEPA requirements. The FSEIS "need not . . . contain 'a complete mitigation plan,'"[491] and the "mitigation plan 'need not be . . . in final form to comply with NEPA's procedural requirements.'"[492] Although the mitigation and monitoring plans discussed in the FSEIS are not all in final form, they still contain the level of detail required to comply with NEPA.[493]

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[486] "At the time of its decision . . . each agency shall prepare a concise public record of decision." 40 C.F.R. § 1505.2.

[487] FSEIS, Ex. NRC-008-A-1, § 3.9.4.

[488] FSEIS, Ex. NRC-008-A-2, § 4.9.

[489] "Even if one assumes that the FEIS did not contain all the information considered by the Staff in its decision, the overall record for the licensing action includes a complete analysis of the cultural resources." *Hydro Res.*, CLI-99-22, 50 NRC at 14.

[490] The Board's findings, and the adjudicatory record, are now also, in effect, part of the FSEIS. *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 53 (2001) (quoting *Claiborne*, CLI-98-3, 47 NRC at 89). Mitigation measures were discussed throughout the evidentiary hearing. *See* Tr. at 1197-1312.

[491] *Hydro Resources*, CLI-06-29, 64 NRC at 427 (quoting *Robertson*, 490 U.S. at 352).

[492] *Hydro Resources*, CLI-06-29, 64 NRC at 427 (quoting *Okanogan Highlands Alliance*, 236 F.3d at 473).

[493] For instance, it is acceptable for initial wildlife mitigation strategies to be discussed in the FSEIS,

(Continued)

We add that we have no reason to doubt that Powertech will fully and faithfully implement the mitigation and monitoring measures and commitments detailed in the FSEIS, License SUA-1600, and associated documents. Nor do we have any reason to doubt that the NRC Staff will fully and faithfully ensure that these mitigation measures are actually implemented. In setting license conditions, the NRC Staff may assume that a licensee will comply with all requirements imposed by the license.[494] However, should any material reason arise suggesting that Powertech has shirked its mitigation or monitoring commitments, the Board trusts that either the agency, as an enforcement action, or public citizens, per the 10 C.F.R. § 2.206 process, will pursue the matter.[495]

A principal aid to the agency in that regard is the monitoring programs for all applicable mitigation measures.[496] Monitoring serves to alert the licensee and/or the agency whether the prescribed mitigation efforts are effective and producing the expected outcomes. Monitoring programs were described or incorporated by reference in the FSEIS and the ROD, and to the degree Powertech has been authorized to perform self-monitoring, the NRC is responsible for establishing and implementing an effective monitoring oversight program. Confirmation should be provided to the NRC Staff, through monitoring results, that mitigation is proceeding as expected by the NEPA documents. If mitigation is unsuccessful, additional environmental analysis may be necessary. Moreover, monitoring information must also be available to the public, as appropriate.[497] It seems reasonable to the Board that NEPA monitoring information, to the extent discoverable under the Freedom of Information Act (FOIA), can be made available to the public and that it would be preferable for such information to be made available proactively.[498]

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but further fleshed out in detail in subsequent documents. *Compare* FSEIS, Ex. NRC-008-A-2, § 4.6.1.1.1.1.2, *with* Ex. APP-071, 2013 Wildlife Monitoring Report, Ex. OST-023, Draft Avian Monitoring and Mitigation Plan, Ex. OST-022, BLM Correspondence, *and* Ex. OST-024, January 10, 2014 U.S. Fish and Wildlife Service Take Permit Application.

[494] *See Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-03-2, 57 NRC 19, 29 (2003) ("We assume that our licensees will comply with this agency's safety regulations."); *see also U.S. Department of Energy* (High-Level Waste Repository), LBP-09-6, 69 NRC 367, 467 (2009) ("[T]he NRC generally presumes that licensees will comply with its regulations.").

[495] *See* Volume 8 — Licensee Oversight Programs, 8.8 Management of Allegations (2010), *available at* http://www.nrc.gov/reading-rm/doc-collections/management-directives/volumes/vol-8.html.

[496] "A monitoring and enforcement program shall be adopted . . . where applicable for any mitigation." 40 C.F.R. § 1505.2(c).

[497] "Upon request, [the lead agency shall] make available to the public the results of relevant monitoring." 40 C.F.R. § 1505.3(c). More broadly, the NRC must make a diligent effort to involve the public in implementation of NEPA procedures. 40 C.F.R. § 1506.6.

[498] 5 U.S.C. § 552; *see also* Office of Management & Budget, Executive Office of the President, "Open Government Directive" (Dec. 8, 2009), *available at* www.whitehouse.gov/open/documents/open-government-directive.

Regarding monitoring, the NRC Staff's Response to Post-Hearing Order drastically misrepresents the agency's role in monitoring the Powertech project.[499] The NRC Staff writes:

> In its 2011 guidance, the CEQ also addresses when an agency must confirm that mitigation measures will be effective. The CEQ first notes that, under its regulations, agencies may "provide for monitoring to assure that their decisions are carried out and should do so in important cases." 76 Fed. Reg. at 3,849 (citing 40 C.F.R. § 1505.3). The CEQ next states:
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>> Accordingly, an agency should also commit to mitigation monitoring in important cases *when relying upon an EA and mitigated FONSI.* Monitoring is essential in those important cases where the mitigation is necessary to support a FONSI and thus is part of the justification for the agency's determination not to prepare an EIS.
>
> *Id.* (emphasis added). The requirement that the agency confirm whether mitigation measures are effective therefore applies only where the agency relies on a mitigated FONSI. This requirement does not apply where, as for the Dewey-Burdock Project, the agency prepares an EIS for its proposed action.[500]

However, the citation provided by the NRC Staff entirely ignores the preceding sentence in the CEQ's guidance, which states, "for agency decisions based on an EIS, the CEQ Regulations explicitly require that 'a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.'"[501] Nothing could more clearly contradict the NRC Staff's assertion. The NRC Staff is required to confirm whether mitigation measures are effective through a monitoring program, which is recognized in Powertech license conditions.

Specifically, License Condition 9.10 states that Powertech's monitoring results must be documented and maintained, and that the results are "subject to NRC review and inspection."[502] Further, monitoring results must be submitted to the NRC on various time tables, quarterly, semiannually, or annually.[503] The NRC already maintains a website containing public information regarding Powertech's Dewey-Burdock project site.[504] The Board suggests that all raw monitoring information gathered from Powertech and reviewed by the NRC Staff could be

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[499] NRC Staff's Response to Post-Hearing Order (Jan. 9, 2015) at 33-34.

[500] *Id.*

[501] 76 Fed. Reg. at 3849 (citing 40 C.F.R. § 1505.2(c)).

[502] Powertech Materials License, Ex. NRC-012, § 9.10.

[503] *Id.* § 11.

[504] U.S. NRC, Dewey Burdock Site, http://www.nrc.gov/info-finder/materials/uranium/licensed-facilities/dewey-burdock.html (last visited Apr. 27, 2015).

publicly posted, except to the extent it may be withheld by exemption from FOIA, on the Dewey-Burdock NRC website.

We conclude that the FSEIS adequately describes proposed mitigation measures and find for the NRC Staff and Powertech on Contention 6.

F. Contention 9: The FSEIS Fails to Consider Connected Actions

1. Legal Standards

When drafting an EIS, an agency's scope of review must include analysis of any connected or cumulative actions to the central proposed action.[505] Actions are connected[506] when they "(i) Automatically trigger other actions which may require environmental impact statements. (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously. (iii) Are interdependent parts of a larger action and depend on the larger action for their justification."[507] To determine when an action is connected, courts use an "independent utility" test. An action lacks independent utility when it would be irrational or unwise to pursue the action without the presence of the EIS-generating central action.[508] Once connected actions have been identified, the agency must evaluate any potential effects in the EIS.[509]

Even actions not directly encompassed by the scope of the proposed action may still be relevant in an EIS. "Cumulative impacts" are impacts resulting "from the incremental impact of the [proposed] action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."[510] All aspects of the FSEIS, including the connected and cumulative actions discussions, must have been subjected to a hard look by the NRC.[511]

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[505] 40 C.F.R. § 1508.25. This regulation has been officially adopted by the NRC. 10 C.F.R. § 51.14(b).

[506] The scope of an EIS includes "connected actions, which means that they are closely related and therefore should be discussed in the same impact statement." 40 C.F.R. § 1508.25(a)(1).

[507] 40 C.F.R. § 1508.25(a)(1)(i)-(iii).

[508] *Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-14-9, 80 NRC 15, 41 (2014) (citing *Society Hill Towers Owners' Association v. Rendell*, 210 F.3d 168, 181 (3d Cir. 2000); *Northwest Resource Information Center, Inc v. National Marine Fisheries Service*, 56 F.3d 1060, 1067-69 (9th Cir. 1995)).

[509] 10 C.F.R. §§ 51.71(d), 51.90; 40 C.F.R. § 1508.25(a)(1).

[510] 40 C.F.R. § 1508.7.

[511] "The principal goals of an FEIS are twofold: to force agencies to take a 'hard look' at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency's decision-making process." *Claiborne*, CLI-98-3, 47 NRC at 87 (citing *Robertson*, 490 U.S. at 349-50).

Before Powertech may commence ISL mining, it is obligated to obtain several permits from agencies other than the NRC. For instance, the underground injection control program, administered by the EPA, regulates injection wells.[512] This program includes Class III wells, used to inject fluids to dissolve and extract minerals such as uranium, and Class V wells, used to dispose of nonhazardous fluids underground.[513] Powertech may need to acquire permits for both classes of wells to operate its ISL facility.[514] The Safe Drinking Water Act (SDWA), also administered by the EPA, provides the method by which all or a portion of an aquifer is exempted, and thus allowed to be used in uranium ore recovery.[515] A National Pollutant Discharge Elimination System (NPDES) permit, issued by the SDDENR, sets the amount of pollutants that can enter surface water.[516] A radon emission standard is part of the EPA's national emission regulations under 40 C.F.R. Part 61, Subpart W, and Powertech may need EPA approval under this subpart before beginning operations.[517]

2. Parties' Positions

At the evidentiary hearing, neither the Oglala Sioux Tribe nor the Consolidated Intervenors offered witnesses for Contention 9.[518] Powertech offered witnesses Hal Demuth, Gwyn McKee,[519] and Doyl Fritz. The NRC Staff offered witnesses Haimanot Yilma, Kellee Jamerson, and James Prikryl.

The Oglala Sioux Tribe alleges in Contention 9[520] that the NRC Staff's FSEIS inappropriately defers to the EPA and South Dakota in the determination that environmental impacts of the proposed project will be SMALL, and that this inadequacy "violates 10 C.F.R. §§ 51.10, 51.70 and 51.71, and [NEPA] and implementing regulations."[521] Specifically, the Oglala Sioux Tribe claims that "the FSEIS fails to conduct any NEPA analysis of" the impacts of EPA-permitted Class III and Class V injection wells, which are connected actions that must be

[512] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.2.3.1.

[513] *Id.*

[514] *Id.*

[515] An aquifer can be exempted "if it does not currently serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because it is mineral, hydrocarbon, or geothermal energy producing." *Id.* § 3.5.3.5.

[516] FSEIS, Ex. NRC-008-A-1, § 1.7.3.6.

[517] *Id.* § 2.1.1.2.

[518] Consolidated Intervenors adopted the Oglala Sioux Tribe's evidence, authority, and arguments regarding deferral of NEPA's required analysis of environmental and waste disposal impacts from Powertech's proposal. Consolidated Intervenor Statement of Position at 10.

[519] Ex. APP-054, Gywn McKee Curriculum Vitae.

[520] LBP-14-5, 79 NRC at 401.

[521] Oglala Sioux Tribe Statement of Position at 38.

analyzed in the NRC Staff's FSEIS.[522] In the alternative, the Oglala Sioux Tribe argues that, even if judged not to be connected actions, impacts from the wells still must be fully analyzed in the FSEIS either in the cumulative impacts analysis, or as part of the NRC Staff's comprehensive hard look.[523] Additionally, the Oglala Sioux Tribe claims that other issues that have been insufficiently analyzed include EPA permits under the SDWA, Subpart W radon controls, and the South Dakota NPDES permit, none of which are subject to a NEPA analysis on their own.[524]

When the FSEIS does discuss non-NRC permits, the Oglala Sioux Tribe alleges that the NRC has not conducted its own analysis, and instead refers and defers to other agencies' future analysis.[525] Asserting that such a deferral is a violation of NEPA, the Oglala Sioux Tribe relies on *South Fork Band Council v. BLM*, 588 F.3d at 726 for the principle that non-NEPA documents, especially when prepared by a state government, cannot satisfy a NEPA obligation.[526] The Oglala Sioux Tribe also relies on 10 C.F.R. § 51.71, which states that environmental impacts will be considered "irrespective of whether a certification or license from the appropriate authority has been obtained."[527] The Oglala Sioux Tribe contends that these legal authorities prohibit the NRC from unreviewed reliance on other agencies' work relative to baseline, potential impacts, and mitigation associated with the project.[528]

Finally, the Oglala Sioux Tribe claims that a Class V well covers only shallow injection of waste material, and Powertech has proposed deep injection, below the lower-most Underground Source of Drinking Water aquifer, which is a Class I well.[529] The Oglala Sioux Tribe claims that South Dakota prohibits Class I wells.[530] The Oglala Sioux Tribe also contends that the FSEIS lacks an adequate discussion of this concern by deferring to the EPA's analysis without review of impacts or the effectiveness of mitigation.[531]

The NRC Staff claims the Oglala Sioux Tribe misread the FSEIS and has failed to show that NEPA was violated.[532] According to the NRC Staff, the very purpose of the FSEIS was to evaluate as a whole Powertech's proposal to inject lixiviant into underground aquifers, using a Class III injection permit, and disposal through

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[522] *Id.*
[523] *Id.*
[524] *Id.* at 40; Oglala Sioux Tribe Post-Hearing Initial Brief at 77.
[525] Oglala Sioux Tribe Statement of Position at 39.
[526] *Id.* at 40.
[527] *See* Oglala Sioux Tribe Statement of Position at 40 (quoting 10 C.F.R. § 51.71).
[528] Oglala Sioux Tribe Post-Hearing Initial Brief at 78.
[529] Oglala Sioux Tribe Statement of Position at 41.
[530] *Id.*
[531] *Id.*
[532] NRC Staff Statement of Position at 52.

possible use of a Class V injection permit.[533] Regarding deferral to EPA analysis, the NRC Staff argues that the FSEIS merely cites the permitting process of other agencies to aid its explanation of how the NRC Staff itself determined the likely impacts in a particular area, and not to substitute for its own analysis.[534] The NRC Staff also states that the FSEIS analyzes both disposal through a Class V well and the possibility that Powertech will not be able to obtain a Class V permit.[535]

Powertech supports the NRC Staff's review of connected actions relative to Powertech's application.[536] Powertech argues that, instead of deferring to the EPA, the NRC Staff consulted with the EPA, and both agencies worked together on multiple drafts throughout the EIS stages.[537] Powertech describes the NRC Staff's process when using another agency's procedure as "evaluat[ing] the characteristics and protective nature of these procedures to determine if they are adequate to satisfy NRC's AEA mission of adequately protecting public health and safety."[538]

Regarding a specific challenge to the FSEIS, Powertech labels the charge that radioactive waste will be disposed of through a Class I well a "false presumption."[539] Powertech comments that the company will treat wastewater, and that any liquid injected into a Class V well would not be hazardous material.[540] Concerning all connected actions, Powertech concludes that the NRC Staff "conducted its own evaluation of the potential impacts" and adequately assessed potential impacts.[541]

3. Board Ruling

All non-NRC permits discussed above are interdependent parts of Powertech's proposed action,[542] and there would be no utility to these permits without the NRC licensing at issue in this proceeding. These are connected actions, and the Board finds that the FSEIS adequately considered them as such. The FSEIS does refer to the analyses done in other permitting schemes and requirements, but this does not constitute an improper deferral to current or future EPA or SDDENR analysis. Instead, it is not only permissible, but necessary, for the NRC Staff to be able to review the interconnected analyses and standards used by other agencies.

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[533] *Id.*
[534] *Id.*
[535] *Id.* at 53.
[536] Powertech Statement of Position at 57.
[537] *Id.* at 58.
[538] *Id.* at 59.
[539] *Id.*
[540] *Id.*
[541] *Id.* at 60.
[542] 40 C.F.R. § 1508.25.

Further, after a review of the FSEIS, the Board finds that though the NRC Staff references the EPA's analysis, the NRC Staff also undertook its own independent review. The NRC Staff does not merely state that Powertech must comply with EPA regulations. Instead, the NRC Staff considers the requirements and effects of other permitting schemes as one aspect of its overall analysis in the FSEIS.

Regarding injection well permits, in Chapter 4 of the FSEIS, when discussing groundwater impacts from construction, the FSEIS indicates that "as part of the applicant's Class III Underground Injection Control permit, all production, injection, and monitoring wells will be cased and cemented to prevent the migration of fluids into and between [Underground Sources of Drinking Water] USDWs."[543] The FSEIS further lists the requirement that all wells "undergo mechanical integrity tests of the casing to ensure against well leakage."[544] Class V wells are also thoroughly discussed both as they "must meet EPA requirements" but also through separate analysis of their design and use, and potential impact on aquifers.[545] And the Board finds no support for the Oglala Sioux Tribe's premise that Class I wells will be used.[546] The FSEIS also considers and evaluates the alternative that "land application for liquid waste disposal" is used instead of or in addition to Class V wells.[547] Class V injection wells are intertwined with the relevant SDWA regulations, and Chapter 4 of the FSEIS relies on SDWA regulations to conclude that Class V injection well impacts to geology and soils will be SMALL.[548] However, the FSEIS also separately analyzes these potential impacts, and states that the NRC also requires releases into any deep aquifers below the production aquifers "to be treated and monitored to verify they meet NRC release standards."[549]

The FSEIS also indicates that the NRC Staff coordinated with the SDDENR on the issues surrounding a NPDES permit.[550] We find that coordinating with a state agency does not constitute deferring to a state agency, and note that the FSEIS separately analyzes the NPDES permit requirements.[551]

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[543] FSEIS, Ex. NRC-008-A-2, § 4.5.2.1.1.1.

[544] *Id.*

[545] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.2.4.1; *see also* FSEIS, Ex. NRC-008-A-2, § 4.5.2.1.1.2.1.

[546] FSEIS, Ex. NRC-008-B-1, § 7.6 ("Class V deep injection wells are being used for disposal rather than Class I wells.").

[547] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.2.4.3; FSEIS, Ex. NRC-008-A-2, § 4.2.1.1.

[548] FSEIS, Ex. NRC-008-A-2, § 4.4.1.1.2.

[549] *Id.* § 4.5.2.1.1.2.3.

[550] FSEIS, Ex. NRC-008-A-1, § 1.7.3.6.

[551] *Id.* § 2.1.1.2.2 (analyzing controls needed for surface water discharge if Powertech is or is not granted an NPDES permit); FSEIS, Ex. NRC-008-A-2, § 4.5.1.1.1.1 (analyzing construction impacts of surface waters in the context of the required NPDES permit, but also stipulating three additional mitigation strategies).

Radon emissions, regulated by the EPA under 40 C.F.R. Part 61, Subpart W, are also evaluated both in the context of and independent of Subpart W. The NRC Staff reviewed radon emission modeling, and "verified that appropriate exposure pathways were modeled and reasonable input parameters were used."[552] The NRC Staff then reviewed the model results in detail, and determined "potential radiation doses to occupationally exposed workers and members of the public during operations will be SMALL."[553] Retention pond siting and design considerations in the FSEIS also included an analysis of Subpart W requirements.[554] And the FSEIS indicates that, in addition to Subpart W requirements, Powertech may also be subject to additional necessary radon-related "license conditions" to ensure requirements are met.[555]

Analysis of this type continues throughout the FSEIS in sections too numerous to reference in full. The Board thus concludes that this comprehensive analysis of connected actions satisfies NEPA's connected action and hard look requirements. Further, since the Board finds that these related permits are treated directly as connected actions to the proposed action, they need not also be reviewed as cumulative actions. Finally, because the NRC Staff did not defer to other agencies' analyses to satisfy NEPA obligations, the *South Fork Band Council* case cited by the Oglala Sioux Tribe is inapposite to this contention. Based on the above, we conclude that the FSEIS adequately considers connected actions and find for Powertech and the NRC Staff on Contention 9.

G. Motion for Leave to File New or Amended Contentions

Having addressed all admitted contentions that were the subject of the Board's August 2014 evidentiary hearing, we next turn to the Oglala Sioux Tribe's pending November 7, 2014 motion for leave to file new or amended contentions.[556] The Oglala Sioux Tribe states that the two new contentions pertain to: "1) the NRC Staff's recent testimony related to its review of the new Powertech borehole data disclosed pursuant to the Board's September 8, 2014 Post-Hearing Order; and, 2) the recently released documents from the [EPA] under its [CERCLA] authority."[557] The Oglala Sioux Tribe alleges the borehole data were reviewed outside of the NEPA process and that the NRC Staff did not submit this material

[552] FSEIS, Ex. NRC-008-A-2, § 4.13.1.2.2.1.

[553] *Id.*

[554] FSEIS, Ex. NRC-008-A-1, § 2.1.1.1.2.4.2.

[555] FSEIS, Ex. NRC-008-A-2, § 4.14.1.4.1.

[556] Motion for Leave to File New or Amended Contention on Behalf of the Oglala Sioux Tribe (Nov. 7, 2014) [hereinafter Oglala Sioux Tribe New Contention Motion].

[557] *Id.* at 1-2.

to the required hard look.[558] The Oglala Sioux Tribe further alleges that the EPA documents should have been but were not reviewed or analyzed in the FSEIS.[559]

On August 21, 2014, the evidentiary hearing concluded.[560] The record, however, was held open to facilitate disclosure by Powertech of certain well log data on September 13, 2014, and to permit the filing by the parties of additional testimony and/or exhibits based on these well log data.[561] Additional testimony and exhibits were filed by the Oglala Sioux Tribe[562] and the NRC Staff,[563] and on November 13, 2014, the Board admitted into evidence Exhibits OST-025 and OST-026, on which these new contentions are based.[564]

As the Oglala Sioux Tribe acknowledges, to gain the admission of a new or amended contention at this stage of the proceeding, a party must meet the requirements of both 10 C.F.R. § 2.309(c) and 2.309(f).[565] Section 2.309(c) states that a request to admit new or amended contentions must satisfy three specific requirements: "(i) The information upon which the filing is based was not previously available; (ii) The information upon which the filing is based is materially different from information previously available; and (iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information."[566] Each of these requirements must be satisfied for a new or amended contention to be admitted. Further, even if contentions are based on an NRC Staff's FSEIS, an intervenor still bears the responsibility of demonstrating that a new contention merits admission and meets all six requirements of 10 C.F.R. § 2.309.[567] A contention cannot be admitted in an NRC hearing unless it meets the criteria in 10 C.F.R. § 2.309(f)(1), which requires that each contention:

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[558] *Id.* at 2.

[559] *Id.* at 3.

[560] Tr. at 1328.

[561] Licensing Board Post Hearing Order (Sept. 8, 2014).

[562] Oglala Sioux Tribe Motion to Admit Additional Exhibits (Oct. 14, 2014); Oglala Sioux Tribe Motion to Admit Additional Exhibits (Nov. 7, 2014); Oglala Sioux Tribe Motion to Admit Additional Testimony and Exhibits (Nov. 21, 2014).

[563] NRC Staff's Motion to Admit Testimony and Exhibits Addressing Powertech's September 14, 2014 Disclosures (Oct. 14, 2014).

[564] Licensing Board Order (Admitting New Exhibits and Closing the Evidentiary Record on Contentions 1A, 1B, 2, 4, 6, and 9) (Nov. 13, 2014).

[565] Oglala Sioux Tribe New Contention Motion at 1.

[566] 10 C.F.R. § 2.309(c)(1)(i)-(iii).

[567] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-00-28, 52 NRC 226 (2000). The intervenors carry the burden of showing that any late-filed contentions are admissible. *See AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260-61 (2009).

> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
>
> (ii) Provide a brief explanation of the basis for the contention;
>
> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
>
> (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
>
> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue . . . ;
>
> (vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.

Additionally, with respect to the need to supplement an issued final EIS, the party offering the new contention has the burden of presenting information sufficient to show that there is a genuine issue regarding whether the NRC Staff should supplement its document.[568] The party offering the contention thus must explain why the new information is sufficiently significant to present "a *seriously* different picture of the environmental landscape."[569] The new information must point to impacts that affect "the quality of the human environment in a significant manner or to a significant extent not already considered."[570]

1. New Contention 1: The NRC Staff's Review of Newly Disclosed Borehole Data Was Inadequate Under, and Failed to Comply with, the National Environmental Policy Act and Implementing Regulations

In proposed New Contention 1 the Oglala Sioux Tribe argues that NEPA requires that the record be reopened and the NRC Staff give the newly disclosed borehole data a hard look. The Oglala Sioux Tribe further alleges that the NRC Staff cannot ignore these data and that the review they were given by the NRC Staff was "without a scientifically valid and sourced methodology."[571]

We conclude that New Contention 1 is inadmissible. It does not meet the standard in 10 C.F.R. § 2.309(c)(2) in that it relies on information that is not materially different from information previously available (and in this case already

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[568] *See* 10 C.F.R. § 51.92; *see also Hydro Resources, Inc.* (Crownpoint Uranium Project), CLI-04-33, 60 NRC 581, 659 (2004).

[569] *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), CLI-12-11, 75 NRC 523, 533 n.53 (2012) (quoting *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-06-3, 63 NRC 19, 28 (2006)).

[570] *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-04-23, 60 NRC 441, 448 (2004) (quoting *Marsh*, 490 U.S. at 374).

[571] Oglala Sioux Tribe New Contention Motion at 8.

in the record). Further, it fails to raise a genuine dispute as required by 10 C.F.R. § 2.309 (f)(1)(vi), and does not meet the requirements in 10 C.F.R. § 51.92 for demonstrating the need to supplement a FSEIS.

In particular, the Oglala Sioux Tribe has not shown that the well log data or the NRC Staff's analysis of those well log data would lead to any new or materially different information or conclusions. The NRC Staff's "spot check" of Powertech's additional borehole log data led the NRC Staff to conclude that its initial analysis was accurate.[572] Similarly, the Oglala Sioux Tribe's review of these same data led them to conclude their original conclusions were correct.[573]

Initially, we note that the process of reviewing representative borehole logs is not new or a materially different approach relative to this proceeding. This review methodology has been practiced by the NRC Staff since the submission of Powertech's license application and throughout its review, culminating in the issuance of Powertech's NRC license. This methodology was reasonable to support issuance of the license application, and is reasonable for review of the additional borehole log data. As such, the use of this methodology does not rise to the level of new and significant or materially different information.

The results of the review by both the NRC Staff and the Oglala Sioux Tribe of Powertech's newly disclosed well log data did not "paint a seriously different picture of the environmental landscape."[574] Consequently, it does not give rise to a genuine issue in dispute, and the proposed contention does not meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(vi).

2. New Contention 2: The NRC Staff NEPA Analysis Fails to Adequately Address or Review the Findings in the EPA's CERCLA Preliminary Assessment or the EPA's Reasonably Foreseeable CERCLA Removal Action

The Oglala Sioux Tribe contends that certain "newly-released EPA documents include findings and conclusions that were not reviewed or analyzed in the FSEIS or any other public NEPA forum, in violation of NEPA and NRC implementing regulations."[575] Specifically, the Oglala Sioux Tribe argues:

> the EPA found that sources of radiological contamination associated with the unreclaimed uranium mines on the Dewey-Burdock property are not just impacting the soil and surface waters at the site, but are also leaking into and through the

[572] NRC Staff's Brief in Support of Answering Testimony (Dec. 9, 2014) at 5.
[573] LaGarry Supplemental Testimony, Ex. OST-029, at 4.
[574] *Vogtle*, CLI-12-11, 75 NRC at 534.
[575] Oglala Sioux Tribe New Contention Motion at 11.

> groundwater so as to contaminate ground water wells at the site, and have [the] potential to impact additional ground water wells at the site.[576]

According to the Oglala Sioux Tribe, "these are issues that should have been, but were not, analyzed in the NRC Staff's NEPA review."[577]

New Contention 2 refers to a Preliminary Assessment recently released by the EPA for the abandoned Darrow/Freezeout/Triangle mine area, which is partially within the Dewey-Burdock site.[578] The Oglala Sioux Tribe alleges that this Preliminary Assessment is new information or contains new information which should be analyzed as part of the FSEIS.

New Contention 2 is inadmissible. It fails to present sufficient information to show a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi), and ignores the fact that the environmental concerns related to the abandoned mines are discussed in the FSEIS. Both the FSEIS and the Preliminary Assessment report that: (1) surface soils near the abandoned uranium mines contain levels of radionuclides above health-based standards; (2) surface and water samples taken from the mine pits and nearby streams contain radionuclides; (3) air samples collected at the uranium mines have elevated levels of radionuclides; and (4) groundwater samples contain levels of radionuclides that exceed drinking water standards.[579] The Preliminary Assessment acknowledges that the NRC Staff evaluated these issues in the FSEIS, and the EPA refers to the NRC Staff's conclusions throughout its Preliminary Assessment.[580]

The Oglala Sioux Tribe fails to show that the Preliminary Assessment is or contains significant new information requiring that the NRC Staff supplement the FSEIS. The Oglala Sioux Tribe therefore fails to raise a genuine issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

H. Ruling on Motions to Strike Filed July 22, 2014

On July 22, 2014, all parties to this proceeding filed various procedural motions in advance of the scheduled August 19-21, 2014 evidentiary hearing. The Oglala Sioux Tribe moved to strike portions of NRC Staff and Powertech prefiled testimony by claiming that this testimony included analysis and information that purportedly supports the FSEIS, but was not included in the FSEIS itself.[581] The Oglala Sioux Tribe asked the Board to strike this material under the theory that

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[576] *Id.*

[577] *Id.*

[578] Preliminary Assessment, Ex. OST-026.

[579] Ex. NRC-174, NRC Staff's Responsive Testimony at 5 (Oct. 24, 2014).

[580] *See* Preliminary Assessment, Ex. OST-026, at 11, 13, 29-30.

[581] Oglala Sioux Tribe's Motion to Strike (July 22, 2014).

an FSEIS cannot be supplemented or rehabilitated by information not included in the FSEIS, and so this material goes beyond the scope of NEPA. The Oglala Sioux Tribe then pointed to a nonexclusive list of examples that it sought to strike from the record in Exhibits NRC-001, APP-003, APP-005, APP-010, APP-064, APP-053, and APP-070. On July 29, 2014, the NRC Staff and Powertech filed answers in opposition to this motion.[582] The NRC Staff claims that the Oglala Sioux Tribe misunderstands the administrative record rule and its conclusion only stands once the NRC has completed a final agency action, which will not be achieved until after the hearing is complete.[583] Powertech responded that its testimony is not intended to supplement the FSEIS, but instead serves to explain why the FSEIS does not need supplementation.

The Consolidated Intervenors moved to limit and exclude Powertech's witness testimony where its technical witnesses offer legal opinions or conclusions.[584] Specifically, Consolidated Intervenors moved to strike portions of two Powertech exhibits.[585] The NRC Staff and Powertech opposed Consolidated Intervenors' motion. The NRC Staff submits that there is a connection between each witness's experience and testimony, and that the Board will ensure the testimony carry weight only to the extent it is supported by other evidence in the record. Powertech responds that its witnesses are not offering legal opinions, but rather their own interpretations of regulations and agency guidance in support of Powertech's counsel's legal opinions. In our August 1, 2014 order[586] we deferred ruling on these two motions. We stated we would "be better able to resolve the disputes surrounding the Oglala Sioux Tribe and Consolidated Intervenor motions upon consideration of the full evidentiary record."[587]

The Board now denies both motions. The Oglala Sioux Tribe's motion is denied because the evidentiary hearing is a part of the review of the FSEIS. In an NRC adjudicatory proceeding, even if a Board finds an environmental impact statement prepared by the NRC Staff inadequate in certain respects, the Board's findings, as well as the adjudicatory record, "become, in effect, part of the [final EIS]."[588] Thus, the Board's ultimate NEPA judgments can be made on

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[582] Powertech (USA), Inc. Response to NRC Staff's, Consolidated Intervenors' and the Oglala Sioux Tribe's Motions in Limine, Motion for Cross-Examination, and Motion to Strike/Exclude (July 29, 2014); NRC Staff's Response to Prehearing Motions (July 29, 2014).

[583] NRC Staff's Response to Prehearing Motions (July 29, 2014) at 2-3.

[584] Consolidated Intervenors' Motion in Limine (July 22, 2014).

[585] Consolidated Intervenors moved to strike portions of Lynn Sebastian's testimony in Ex. APP-001, Written Testimony of Lynne Sebastian, and portions of Mr. Lawrence's testimony in Lawrence Testimony, Ex. APP-037.

[586] Licensing Board Order (Ruling on Motions in Limine: Motions to Strike and for Cross-Examination) (Aug. 1, 2014) (unpublished).

[587] *Id.* at 12.

[588] *Hydro Res.*, CLI-01-4, 53 NRC at 53 (quoting *Claiborne*, CLI-98-3, 47 NRC at 89).

the basis of the entire adjudicatory record in addition to the NRC Staff's FSEIS.[589] The Consolidated Intervenors' motion is also denied. The witnesses' testimony challenged is admitted in its entirety and has been given the weight it is due based on the qualifications and background of the witnesses. Any legal conclusions in the testimony at issue are accepted as the technical witnesses' understanding of legal requirements.

V. CONCLUSION AND BOARD ORDER

Pursuant to 10 C.F.R. § 2.1210, the Atomic Safety and Licensing Board assigned to hear the contentions raised in this case resolves all issues pending before it and terminates this proceeding as follows:

A. Contention 1A is resolved in favor of the Oglala Sioux Tribe and the Consolidated Intervenors. The Board finds that the NRC Staff has not carried its burden of demonstrating that its FSEIS complies with NEPA and with 10 C.F.R. Part 40. The environmental documents do not satisfy the requirements of NEPA, as they do not adequately address Sioux tribal cultural, historic, and religious resources. The NRC Staff can remedy this deficiency in the Record of Decision in this proceeding by promptly initiating a government-to-government consultation with the Oglala Sioux Tribe to identify any adverse effects to cultural, historic, or religious sites of significance to the Oglala Sioux Tribe which may be impacted by the Powertech Dewey-Burdock project, and to adopt measures to mitigate such adverse effects, as necessary. The FSEIS and Record of Decision in this case must be supplemented, if necessary, to include any cultural, historic, or religious sites identified and to discuss any mitigation measures necessary to avoid any adverse effects.

B. Contention 1B is resolved in favor of the Oglala Sioux Tribe. Meaningful consultation as required by statute has not occurred. The NRC Staff can remedy this deficiency in the Record of Decision in this proceeding by promptly initiating a government-to-government consultation with the Oglala Sioux Tribe to identify any adverse effects to cultural, historic, or religious sites of significance to the Oglala Sioux Tribe which may be impacted by the Powertech Dewey-Burdock project, and to adopt measures to mitigate such adverse effects, as necessary.

C. Contention 2 is resolved in favor of the NRC Staff and Powertech. The NRC Staff has carried its burden of demonstrating that the FSEIS com-

[589] *See National Enrichment Facility*, LBP-05-13, 61 NRC at 404, *aff'd*, CLI-06-22, 64 NRC 37 (2006).

plies with NEPA and with 10 C.F.R. Part 40 and that the collection of baseline/background groundwater data in a phased manner as outlined in NUREG-1569 is not a violation of NEPA.

D. Contention 3 is resolved in favor of the NRC Staff and Powertech with an additional license condition. With the addition of a license condition the NRC Staff has carried its burden of demonstrating that the FSEIS complies with NEPA and with 10 C.F.R. Part 40 and includes adequate hydrogeological information. NRC License No. SUA-1600 is *revised* to include a new requirement that:

> Prior to conducting tests for a wellfield data package, the licensee will attempt to locate and properly abandon all historic drill holes located within the perimeter well ring for the wellfield. The licensee will document, and provide to the NRC, such efforts to identify and properly abandon all drill holes in the wellfield data package.

E. Contention 4 is resolved in favor of the NRC Staff and Powertech. The Board finds that the NRC Staff has carried its burden of demonstrating that the FSEIS complies with NEPA and with 10 C.F.R. Part 40 and has adequately analyzed groundwater quantity impacts.

F. Contention 6 is resolved in favor of the NRC Staff and Powertech. The Board finds that the NRC Staff has carried its burden of demonstrating that the FSEIS complies with NEPA and with 10 C.F.R. Part 40 and has adequately described and analyzed proposed mitigation measures.

G. Contention 9 is resolved in favor of the NRC Staff and Powertech. The Board finds that the NRC Staff has carried its burden of demonstrating that the FSEIS complies with NEPA and with 10 C.F.R. Part 40 and has adequately considered connected actions.

H. New Contention 1 is *not admitted* because it does not meet the standard in 10 C.F.R. § 2.309(c)(2) and fails to raise a genuine dispute as required by 10 C.F.R. § 2.309 (f)(1)(vi). It also does not meet the requirements in 10 C.F.R. § 51.92 for supplementing a FSEIS.

I. New Contention 2 is *not admitted* because it fails to present sufficient information to show a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

J. The Oglala Sioux Tribe Motion to Strike filed July 22, 2014, is *denied*.

K. The Consolidated Intervenors' Motion in Limine filed July 22, 2014, is *denied*.

L. Pursuant to 10 C.F.R. § 2.1207(a)(3)(iii) the Board, by separate order,

is providing to the Commission's Secretary a copy of all questions submitted by the parties prior to and during the course of the evidentiary hearing.

M. The Licensing Board retains jurisdiction over the final resolution of Contentions 1A and 1B. The NRC Staff shall file a monthly report, beginning June 2015, with the Board on its progress in addressing the outstanding issues in Contentions 1A and 1B. The NRC Staff's final monthly report shall demonstrate that the FSEIS complies with NEPA and with 10 C.F.R. Part 40 and include an agreement reflecting the parties' settlement of their dispute regarding the contentions or a motion for summary disposition of Contentions 1A and 1B.

In accordance with 10 C.F.R. § 2.1210, as to Contentions 2, 3, 4, 6, and 9, this Partial Initial Decision will constitute a final decision of the Commission 120 days from the date of issuance (or the first agency business day following that date if it is a Saturday, Sunday, or federal holiday, *see* 10 C.F.R. § 2.306(a)), i.e., on August 28, 2015, unless a petition for review is filed in accordance with 10 C.F.R. § 2.1212, or the Commission directs otherwise. Any party wishing to file a petition for review regarding the Board's rulings on Contenions 2, 3, 4, 6, and 9 on the grounds specified in 10 C.F.R. § 2.341(b)(4) must do so within twenty-five (25) days after service of this Partial Initial Decision. The filing of a petition for review is mandatory for a party to have exhausted its administrative remedies before seeking judicial review. Within 25 days after service of a petition for review, parties to the proceeding may file an answer supporting or opposing Commission review. Any petition for review and any answer shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD[590]

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Mark O. Barnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
April 30, 2015

[590] Dr. Richard F. Cole, who served with distinction as a full-time technical member of the Atomic Safety and Licensing Board Panel beginning in 1973, was a member of this Licensing Board from its inception. He participated in the September 19-20, 2013 site visit, the August 18, 2014 limited appearance sessions, and the August 19-21, 2014 evidentiary hearing. Judge Cole passed away on December 11, 2014, before this decision was finalized.

Cite as 86 NRC 167 (2017) **LBP-17-9**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Mark O. Barnett
G. Paul Bollwerk, III

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium Recovery Facility) **October 19, 2017**

This Order concerns a motion for summary disposition in an ongoing proceeding involving the Source Materials License issued to Powertech (USA), Inc., (Powertech) to construct and operate an in situ uranium recovery (ISR) facility. In the prior Partial Initial Decision, the Board had ruled in favor of the NRC Staff and Powertech on all contentions save for Contentions 1A and 1B, on which the Board found for the Oglala Sioux Tribe and Consolidated Intervenors. Regarding Contention 1B, the Board determined that the NRC Staff had not complied with the National Historic Preservation Act (NHPA) because meaningful government-to-government consultations between the Oglala Sioux Tribe and the NRC Staff had not taken place. As to Contention 1A, the Board concluded that the NRC Staff had not satisfied its National Environmental Policy Act (NEPA) responsibility because the Final Supplemental Environmental Impact Statement (FSEIS) did not adequately address Sioux tribal cultural, religious, and historic resources. In this Order, the Board grants the NRC Staff's motion for summary disposition on Contention 1B, but denies it on Contention 1A.

RULES OF PRACTICE: SUMMARY DISPOSITION; STANDARDS

The standards governing summary disposition in Subpart L proceedings are set out at 10 C.F.R. § 2.1205, and "are based upon those the federal courts apply to motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010).

RULES OF PRACTICE: SUMMARY DISPOSITION; STANDARDS

Summary disposition may be granted "if the filings in the proceedings, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law." 10 C.F.R. § 2.710(d)(2). This standard establishes a two-part test: First, a board must determine if any material facts remain genuinely in dispute; second, if no disputes remain, the board must determine if the movant's legal position is correct. *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-31, 74 NRC 643, 648 (2011).

RULES OF PRACTICE: SUMMARY DISPOSITION; BURDEN OF PROOF

The moving party carries the burden of demonstrating that summary disposition is appropriate and must explain in writing the basis for the motion. *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993). To support its motion, the moving party must also "attach . . . a short and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard." 10 C.F.R. § 2.710(a). "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 255 (1986).

RULES OF PRACTICE: SUMMARY DISPOSITION

Summary disposition should not be granted if it would require the board to engage in the making of "[c]redibility determinations, the weighing of the evidence, [or] the drawing of legitimate inferences from the facts." *Anderson,* 477 U.S. at 255. Doing so would require the board to "conduct a trial on the written record by weighing the evidence and endeavoring to determine the truth of the matter." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-16-3, 83 NRC 169, 176 (2016). Instead, the board's

only role in deciding whether to grant a motion for summary disposition is to determine whether any genuine issues of material fact exists. *Anderson,* 477 U.S. at 249.

NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the NHPA requires federal agencies, prior to approving any "undertaking," to "take into account the effect of the undertaking on any historic property." 54 U.S.C. § 306108 (2012). A federal agency must make a reasonable and good faith effort to identify historic properties; determine whether identified properties are eligible for listing on the National Register of Historic Places based on the criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found; determine whether the effects will be adverse; and avoid or mitigate any adverse effects. 36 C.F.R. §§ 800.4(b)-(c), 800.5, 800.6. The federal agency must also confer with a State Historic Preservation Officer and seek the approval of the Advisory Council on Historic Preservation. *Muckleshoot Indian Tribe v. U.S. Forest Serv.,* 177 F.3d 800, 805 (9th Cir. 1999).

NATIONAL HISTORIC PRESERVATION ACT: CONSULTATION

The NHPA requires agencies to consider the unique interests and viewpoints of Native Americans in determining what to place on the National Register, such that "[p]ropert[ies] of traditional religious and cultural importance to an Indian tribe . . . may be determined to be eligible for inclusion on the National Register." 54 U.S.C. § 302706(a). Section 106 also contains a role for Indian tribes as consulting parties in the NHPA process: "[I]n carrying out its responsibilities under [section 106 of the NHPA], a Federal agency shall consult with any Indian tribe . . . that attaches religious and cultural significance to [eligible] propert[ies]." *Id.* § 302706(b).

NATIONAL HISTORIC PRESERVATION ACT: CONSULTATION

Each agency during the consultation process must "[g]ather information from any Indian tribe . . . to assist in identifying properties, including those located off tribal lands, which may be of religious and cultural significance to them and may be eligible for the National Register." 36 C.F.R. § 800.4(a)(4). Agency consultation must provide each Indian tribe with "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties

and participate in the resolution of adverse effects." *Id.* § 800.2(c)(2)(ii)(A). That opportunity should be both meaningful and timely. Additionally, the ACHP's regulations also state that consultation efforts must "recognize the government-to-government relationship between the Federal Government and Indian tribes," and be sensitive to the needs of the tribal participants. 36 C.F.R. § 800.2(c)(2)(ii)(C).

NATIONAL HISTORIC PRESERVATION ACT: CONSULTATION

The "NHPA does not empower an Indian tribe to delay or stall a licensing proceeding." *Crow Butte Resourses, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-16-7, 83 NRC 340, 383 (2016), *appeals pending.* As is the case with the NEPA process, section 106 does not dictate an end result.

NATIONAL ENVIRONMENTAL POLICY ACT: PURPOSE OF INQUIRY

NEPA has two principal objectives. First, it seeks to ensure that an agency considers every significant aspect of the environmental impact of a proposed action. *Baltimore Gas & Elec. Co. v. NRDC,* 462 U.S. 87, 97 (1983). Second, it is intended to guarantee that the agency informs the public that it has, in fact, considered environmental concerns in its decision-making process. *Id.*

NATIONAL ENVIRONMENTAL POLICY ACT: HARD LOOK

To effect these cardinal goals, NEPA directs agencies to prepare a detailed environmental impact statement for proposed actions "significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C) (2012). Adverse effects that must be evaluated include "ecological . . . , aesthetic, historic, cultural, economic, social, or health" effects. 40 C.F.R. § 1508.8. And in assessing any adverse effects, NEPA requires that an agency take a "hard look" at the environmental consequences of a planned action. *Marsh v. Oregon Nat. Res. Council,* 490 U.S. 360, 374 (1989). *Limerick Ecology Action, Inc. v. NRC,* 869 F.2d 719, 745 (3d Cir. 1989).

NATIONAL ENVIRONMENTAL POLICY ACT: RULE OF REASON

NEPA does not require agencies to analyze every conceivable aspect of a proposed project. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002). NEPA's requisite "hard look" is subject to a "rule of reason." *See, e.g., NRDC v. Morton,* 458 F.2d 827,

834 (D.C. Cir. 1972). Agencies need not consider risks that are "remote and speculative" or events that have a very low probability of occurring.

NATIONAL ENVIRONMENTAL POLICY ACT: RULE OF REASON

An environmental impact statement is not a "research document," and, in assessing foreseeable impacts, there "will always be more data that could be gathered," so that agencies "must have some discretion to draw the line and move forward with decisionmaking." *Pilgrim,* CLI-10-11, 71 NRC at 315 (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)). In assessing these impacts, the agency is not required to use "the best scientific methodology" or study phenomena "for which there are not yet standard methods of measurement or analysis." *Id.* (quoting *Winthrop,* 535 F.3d at 12-13). Agencies are free to "select their own methodology as long as that mythology is reasonable." *Id.* at 316 (quoting *Winthrop,* 535 F.3d at 13).

NATIONAL ENVIRONMENTAL POLICY ACT: UNOBTAINABLE INFORMATION

When an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment, "the agency shall always make clear that such information is lacking. 40 C.F.R. § 1502.22. Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the environmental impact statement. *Id.* § 1502.22(a). If the costs of obtaining the information are exorbitant, the agency must include in the FSEIS: (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. *Id.* § 1502.22(b).

NATIONAL ENVIRONMENTAL POLICY ACT: ENVIRONMENTAL IMPACT STATEMENT; LICENSING BOARD DECISION AS AMENDMENT

In an NRC adjudicatory hearing, even if the board finds the environmental impact statement inadequate in some respects, the board's findings, as well as

the adjudicatory record, "become, in effect, part of the [FSEIS]." *In re Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 53 (2001). A board's ultimate NEPA judgments are made on the basis of the entire adjudicatory record in addition to the NRC Staff's FSEIS. *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385, 404 (2005).

RULES OF PRACTICE: SUMMARY DISPOSITION; MATERIAL FACT IN DISPUTE

The Board has the authority to deny a motion for summary disposition if it finds there is a material fact in dispute, even if the opposing party fails to make any claim there is a material fact in dispute. *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753-54 (1977).

RULES OF PRACTICE: MANDATORY DISCLOSURES

Section 2.336 of 10 C.F.R. provides for "general discovery" in Subpart L proceedings. The regulation requires that "all parties . . . shall . . . disclose and provide . . . all documents and data compilations in the possession, custody, or control of the party that are relevant to the contentions." 10 C.F.R. § 2.336(a)(2)(i). The regulation establishes that each party's duty to submit these mandatory disclosures is ongoing and that each party must make these mandatory disclosures once a month and without the filing of a discovery request by other parties. *Id.* § 2.336(a), (d). The scope of mandatory disclosures is "wide-reaching." *Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 572 (2009). Because the mandatory disclosures are the only form of discovery in Subpart L proceedings, they, "like all discovery exchanges, cover a vast array of information and documents that are not evidence and need not meet the requirements of admissible evidence." *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-30, 70 NRC 1039, 1046 (2009) (citing 10 C.F.R. § 2.705(b)(1)).

LICENSING BOARD(S): AUTHORITY TO MANAGE SCHEDULE FOR ADJUDICATORY HEARING

Although it is inappropriate for the Board to direct the NRC Staff in the completion of its NEPA review activities, it is also clear that the Board is given the responsibility to manage the schedule for this adjudicatory proceeding. *See* 10 C.F.R. §§ 2.319(k), 2.332.

MEMORANDUM AND ORDER

(Granting Summary Disposition as to Contention 1B, Denying Summary Disposition as to Contention 1A, and Establishing Further Procedures)

On April 30, 2015, this Licensing Board issued a Partial Initial Decision addressing seven contentions raised by the Oglala Sioux Tribe and the Consolidated Intervenors concerning the Source Materials License issued to Powertech (USA), Inc. (Powertech), to construct and operate an in situ uranium recovery (ISR) facility.[1] The Board ruled in favor of the NRC Staff and Powertech on all contentions save for Contentions 1A and 1B, on which the Board found for the Oglala Sioux Tribe and Consolidated Intervenors.[2] Regarding Contention 1B, the Board determined that the NRC Staff had not complied with the National Historic Preservation Act (NHPA) because meaningful government-to-government consultations between the Oglala Sioux Tribe and the NRC Staff had not taken place.[3] As to Contention 1A, the Board concluded that the NRC Staff had not satisfied its National Environmental Policy Act (NEPA) responsibility because the Final Supplemental Environmental Impact Statement (FSEIS) did not adequately address Sioux tribal cultural, religious, and historic resources.[4] The Board stated that these deficiencies could be remedied if the NRC Staff initiated government-to-government consultations with the Oglala Sioux Tribe[5] and took the steps necessary to ensure that an adequate analysis of tribal cultural resources was included in the FSEIS and the Record of Decision in this case.[6]

The NRC Staff now moves for summary disposition on both contentions. We grant the motion as to Contention 1B, concluding that over the past 2 years the combination of multiple attempts at direct correspondence, a May 19, 2016 face-to-face meeting, and a January 31, 2017 teleconference between the Oglala Sioux Tribe and the NRC Staff satisfies, at a bare minimum, the NHPA's requirement that the NRC Staff consult with the Oglala Sioux Tribe. However, we deny the NRC Staff's motion as to Contention 1A, concluding that the NRC Staff has failed to establish that there are no material facts in dispute relative to the NRC Staff's NEPA burden to adequately address the impact of the Dewey-Burdock project on tribal cultural resources. More specifically, the NRC Staff has failed to demonstrate that there is no material factual dispute regarding the

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[1] LBP-15-16, 81 NRC 618 (2015), *aff'd,* CLI-16-20, 84 NRC 219 (2016).
[2] *Id.* at 708-10.
[3] *Id.* at 708.
[4] *Id.*
[5] *Id.* at 656-57.
[6] *Id.* at 653-55.

reasonableness of its method for assessing impacts from the Dewey-Burdock project on Sioux tribal cultural resources. Finally, given this ruling, as steps toward resolving Contention 1A, we establish a schedule for this proceeding that provides the NRC Staff and the other parties an additional opportunity to establish a methodology for assessing such cultural resource impacts, as well as, if necessary, an evidentiary hearing and a subsequent Board decision on the reasonableness of the NRC Staff's methodology.

I. BACKGROUND

1. Procedural History Preceding the Partial Initial Decision

A detailed procedural history of this proceeding can be found in the Board's April 30, 2015 Partial Initial Decision.[7] In summary, on February 25, 2009, Powertech applied for a combined source and 11e.(2) byproduct material license to construct and operate the proposed Dewey-Burdock in situ leach uranium recovery facility in Custer and Fall River counties, South Dakota.[8] Subsequently, the Oglala Sioux Tribe filed an April 6, 2010 Request for Hearing and Petition for Leave to Intervene and, on March 8, 2010, six individuals and two organizations (collectively, Consolidated Intervenors) filed an additional Request for Hearing and Petition for Leave to Intervene.[9] In an August 5, 2010 ruling, the Board admitted both the Oglala Sioux Tribe and Consolidated Intervenors as Intervenors.[10] The Board admitted four of the Oglala Sioux Tribe's contentions and three of the Consolidated Intervenors' contentions.[11]

On November 26, 2012, the NRC Staff issued a Draft Supplemental Environmental Impact Statement (DSEIS).[12] In a January 25, 2013 submission, the Oglala Sioux Tribe and Consolidated Intervenors proposed new contentions based on the DSEIS.[13] In a July 22, 2013 decision, the Board admitted a total of nine contentions based on the new and original contentions.[14] Thereafter, with

[7] *Id.* at 626-35.
[8] *Id.* at 626-27.
[9] *Id.* at 628.
[10] *Id.* at 629.
[11] *Id.* at 629-30.
[12] *Id.*
[13] *Id.*
[14] LBP-13-9, 78 NRC 37, 112-13 (2013). The seven original contentions contesting the adequacy of various aspects of Powertech's Environmental Report were migrated to challenges of the applicable portions of the DSEIS. *Id.* at 50. Several of the original seven contentions were reformulated by the Board for a total of five admitted contentions, and of the three new contentions that were admitted, one was split into two contentions for a total of four new contentions. *Id.* at 112-13.

the January 29, 2014 issuance of the FSEIS, the admitted contentions migrated to challenge the FSEIS.[15] Subsequently, two of the admitted contentions — Contentions 14A and 14B — were voluntarily withdrawn by the Oglala Sioux Tribe.[16]

On April 8, 2014, the NRC Staff issued a 10 C.F.R. Part 40 source materials license to Powertech, authorizing it to possess and use source and byproduct material in connection with the Dewey-Burdock project.[17] With the license in effect, from August 19 through August 21, 2014, the Board held an evidentiary hearing on the Oglala Sioux Tribe's and Consolidated Intervenors' seven contentions.[18] On April 30, 2015, the Board issued a Partial Initial Decision on the merits of those seven contentions.[19]

2. The Partial Initial Decision and the Commission's Review

The Partial Initial Decision resolved all contentions in favor of the NRC Staff and Powertech except for Contentions 1A and 1B, on which the Oglala Sioux Tribe and Consolidated Intervenors prevailed.[20] Contention 1A pertained to the NRC Staff's NEPA obligation to assess the impacts to Native American cultural, religious, and historic resources.[21] The NRC Staff explained that its efforts to satisfy its NEPA obligation included inviting a total of twenty tribes "to participate in identification efforts" and "provid[ing] all interested tribes a reasonable opportunity to identify historic properties, advise on the identification and evaluation of such properties, comment on the undertaking, and participate in resolving potential adverse effects."[22] The NRC Staff noted that the Oglala Sioux Tribe "had the same opportunity to participate in each phase of the NRC

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[15] LBP-15-16, 81 NRC at 631-32. Under the "migration tenet," when the information in the NRC Staff's final environmental impact statement is "sufficiently similar" to the NRC Staff's draft environmental impact statement, an existing contention based on the draft environmental impact statement can "migrate" to apply to the NRC Staff's final environmental impact statement as it applied to the draft environmental impact statement. *See generally Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), CLI-16-13, 83 NRC 566, 570 n.17 (2016) (citing *Strata Energy, Inc.* (Ross In Situ Uranium Recovery Project), LBP-13-10, 78 NRC 117, 132-33 (2013)).

[16] LBP-15-16, 81 NRC at 633.

[17] *Id.* at 632. On April 30, 2014, the Board granted a temporary stay of the license in response to motions to stay from both intervenors. *Id.* However, after oral arguments on those motions, the Board lifted the temporary stay and denied the motion on May 20, 2014. *Id.*

[18] *Id.* at 633.

[19] *Id.* at 708-11.

[20] *Id.* at 708-10.

[21] *Id.* at 653.

[22] *Id.* at 652.

Staff's review as all consulting tribes," and that it was "afforded an opportunity to participate in a field survey, but [they] chose not to participate."[23]

The Board found these efforts insufficient because "[t]o fulfill the agency's NEPA . . . responsibilities to protect and preserve cultural, religious, and historical sites important to the Native American tribal cultures in the Powertech project area, the NRC Staff must conduct a study or survey of tribal cultural resources before granting a license."[24] The Board determined that the NRC Staff failed to fulfill this obligation because the FSEIS does "not contain an analysis of the impacts of the project on the cultural, historical, and religious sites of the Oglala Sioux Tribe and the majority of the other consulting Native American tribes."[25] Accordingly, the Board concluded that "[w]ithout additional analysis as to how the Powertech project may affect the Sioux Tribes' cultural, historical, and religious connections with the area, NEPA's hard look requirement ha[d] not been satisfied, and potentially necessary mitigation measures ha[d] not been established."[26]

On Contention 1B, the Board decided that the NRC Staff had failed to provide the Oglala Sioux Tribe with a meaningful opportunity for government-to-government consultation.[27] Attempts at consultation began in 2010 when the NRC Staff invited multiple tribes to participate as consulting parties in the NHPA section 106 process.[28] The Board concluded, however, that consultation efforts with the Oglala Sioux Tribe had broken down by 2014, resulting in a majority of the consulting tribes declining to participate in the open-site survey.[29] Although the NRC Staff held several large group meetings with representatives of multiple Native American tribes, solicited survey proposals, and included reports from three of the tribes, in the Board's estimation, these efforts were insufficient to constitute the requisite NHPA government-to-government consultation with the Oglala Sioux Tribe specifically.[30] The meetings held between the NRC Staff and the Oglala Sioux Tribe had not been one-on-one consultations, but instead were "large group meetings, with members of many diverse Tribes, all with varying degrees of attachment" to the license area.[31] Additionally, while the NRC Staff sent many letters to the Oglala Sioux Tribe, the Board noted that "quantity

[23] *Id.* at 652-53.
[24] *Id.* at 655.
[25] *Id.*
[26] *Id.*
[27] *Id.* at 657.
[28] *Id.* at 644.
[29] *Id.* at 648-49, 655.
[30] *Id.* at 656.
[31] *Id.*

does not necessarily equate with meaningful or reasonable consultation."[32] The Board determined that, while "[t]he NRC Staff [wa]s at least partly at fault for the failed consultation process[,] . . . the Oglala Sioux Tribe [did] share some responsibility for the inadequacy of the FSEIS and the lack of meaningful consultation" because "some of its demands to engage with the NRC Staff were patently unreasonable."[33]

The Board concluded that additional consultation with the Oglala Sioux Tribe, the tribe with "the most direct historical, cultural, and religious ties to the area," was required for NRC Staff to satisfy its consultation obligations under section 106.[34] The Board observed that the NHPA errors could be remedied by "promptly initiating a government-to-government consultation with the Oglala Sioux Tribe to identify any adverse effects to cultural, historic, or religious sites of significance," adopting any mitigation measures, and supplementing, if necessary, the FSEIS and Record of Decision.[35]

The Board thus retained jurisdiction over this proceeding pending further consultations between the Oglala Sioux Tribe and the NRC Staff.[36] The Board further required the NRC Staff to submit monthly status reports describing its consultation efforts with the Oglala Sioux Tribe.[37]

Subsequently, all four parties to the proceeding timely filed petitions for review of the Partial Initial Decision.[38] Relevant to the motion now before the Board, the NRC Staff and Powertech challenged the Board's rulings on Contentions 1A and 1B and the Board's retention of jurisdiction over these two contentions.[39] On December 23, 2016, the Commission agreed with the Board

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[32] *Id.*

[33] *Id.* at 656-57. Specifically, the Board found that the cost of the survey proposal, estimated at close to $1 million, Tr. at 807 (Aug. 19, 2014), was unreasonable. LBP-15-16, 81 NRC at 657 n.229. The Makoche Wowapi proposal was estimated to cost approximately $818,000. Makoche Wowapi/Mentz-Wilson Consultants, Proposal with Cost Estimate for Traditional Cultural Properties Survey for Proposed Dewey Burdock Project (Sept. 27, 2012) at 1 (ADAMS Accession No. ML15244B360) [hereinafter Makoche Wowapi Proposal] (this redacted version was created for use in an evidentiary hearing in another in situ mining license proceeding, a public version was not created when the Board held hearings prior to the Partial Initial Decision).

[34] *Id.* at 656-57.

[35] *Id.* at 657-58.

[36] *Id.* at 658.

[37] *Id.*

[38] *See* CLI-16-20, 84 NRC at 224-27.

[39] *Id.* at 227. The Oglala Sioux Tribe and the Consolidated Intervenors both also sought review of the Board's decision to leave the materials license in place, rather than suspending the license due to the deficiencies in the NEPA review. *Id.* at 225. The Board left the license in place, but provided the Oglala Sioux Tribe with the opportunity to petition for a stay within ten days of the Initial Decision if the Oglala Sioux Tribe believed that cultural, historic, or religious sites were

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that the NRC Staff's efforts were inadequate, affirmed the Board's decision on Contentions 1A and 1B, and acknowledged the proceeding remained in the Board's jurisdiction to resolve the deficiencies identified in the Partial Initial Decision.[40]

Addressing Contention 1A, the Commission concluded that the Board did not commit "clear error" in its factual determination that the NRC Staff's consideration of Oglala Sioux Tribe and other Native American cultural resources failed to satisfy NEPA's hard look standard.[41] On Contention 1B, the Commission determined that "[t]he Board, after a merits hearing, reasonably concluded that the Staff's consultation with the Tribe was insufficient to meet these requirements."[42] Thus, the Commission found no legal error in the Board's findings on Contentions 1A and 1B.[43]

Lastly, as to the retention of jurisdiction, the NRC Staff and Powertech argued that the Board overstepped its authority by "prescribing a process for the Staff to resolve the deficiencies identified in Contentions 1A and 1B."[44] While the Commission agreed in principle that it would exceed the Board's authority to direct the NRC Staff to engage in "government-to-government" consultation with the Oglala Sioux Tribe, the Commission found that the Board's decision did not state that it would directly oversee the NRC Staff's review of cultural resources — "instead, it [left] it to the Staff — either by agreement among the parties or by motion for summary disposition — to determine when it has addressed the deficiencies identified by the Board."[45] The Commission thus concluded that the Board had not overstepped the bounds of its authority, and, in carrying out the Board's order, the NRC Staff "is free to select whatever course of action it deems appropriate to address the deficiencies identified in the Board's order, including, but not limited to further government-to-government consultation."[46]

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subject to immediate and irreparable harm. LBP-15-16, 81 NRC at 658. The Oglala Sioux Tribe did not bring such a petition to the Board, and the Commission affirmed the Board's decision to leave the license in place. CLI-16-20, 84 NRC at 245.

[40] CLI-16-20, 84 NRC at 262.

[41] *Id.* at 247-48.

[42] *Id.* at 249.

[43] *Id.*

[44] *Id.* at 250 (internal quotation marks omitted).

[45] *Id.*

[46] *Id.* at 251. The Commission also affirmed the Board's direction to the NRC Staff to submit monthly status reports. *Id.* at 262.

3. Procedural History Subsequent to the Partial Initial Decision

Although the Oglala Sioux Tribe and the NRC Staff differ in how they characterize much of the NRC Staff's consultation efforts after the Partial Initial Decision, both parties' timelines begin on June 23, 2015, with a letter from the Director of the Division of Fuel Cycle Safety, Safeguards and Environmental Review, NRC Office of Nuclear Material Safety and Safeguards, to John Yellow Bird Steele, the President of the Oglala Sioux Tribe, seeking to reinitiate government-to-government consultation.[47] In that letter, the NRC Staff stated that it "recognize[d] the purpose and importance of the consultation process in its evaluation of environmental effects . . . on cultural and historic resources" and that it "appreciate[d] the opportunity to further consult with the Oglala Sioux Tribe."[48] The letter "extend[ed] another invitation for the Oglala Sioux Tribe to meet with the NRC staff on a government-to-government basis."[49] The Oglala Sioux Tribe responded approximately 1 month later seeking to clarify the roles and responsibilities of the NRC Staff and its plans to fulfill its NHPA and NEPA obligations.[50]

Nearly a year passed before the first face-to-face consultation meeting took place on May 19, 2016, in Pine Ridge, South Dakota.[51] The Pine Ridge face-to-face meeting included a member from the Oglala Sioux Tribe's Executive Committee, the Oglala Sioux Tribe's Tribal Historic Preservation Officer (THPO), the Oglala Sioux Tribe's counsel, a Division Director for the NRC Staff, the NRC Staff's counsel, and the NRC Staff's project managers responsible for oversight of the Dewey-Burdock project.[52] The purpose, as described in the meeting summary, was to introduce the new NRC management team and to begin government-to-government discussions regarding identification of cultural

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[47] NRC Staff's Motion for Summary Disposition of Contentions 1A and 1B at 20 (Aug. 3, 2017) [hereinafter NRC Staff's Motion]; Oglala Sioux Tribe's Response in Opposition to NRC Staff Motion for Summary Disposition of Contentions 1A and 1B at 4 (Sept. 1, 2017) [hereinafter Oglala Sioux Tribe's Response]; Letter from Marissa G. Bailey, Director, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to John Yellow Bird Steele, President, Oglala Sioux Tribe at 1-2 (June 23, 2015) (ADAMS Accession No. ML15175A411) [hereinafter NRC Staff June 23, 2015 Letter].

[48] NRC Staff June 23, 2015 Letter at 1-2.

[49] *Id.* at 2.

[50] Letter from Denis Yellow Thunder, Tribal Historic Preservation Officer (THPO), Oglala Sioux Tribe, to Marissa G. Bailey, Director, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (July 22, 2015) (ADAMS Accession No. ML15203A108).

[51] Summary of Meeting with the Oglala Sioux Tribe Regarding Dewey-Burdock In Situ Uranium Recovery Project (May 19, 2016) (ADAMS Accession No. ML16182A069) [hereinafter May 19, 2016 Meeting Summary].

[52] *Id.* at 1.

resources in the license area.[53] At this meeting, the Oglala Sioux Tribe voiced its objections and concerns, asserting that "the tribal survey conducted in 2013 was incomplete and the survey methodology lacked scientific integrity."[54] The open-site survey methodology, proposed by the NRC Staff in February 2013, allowed each tribe to send representatives to the site to examine any area during a 1-month period, and included per diem for three tribal representatives from each tribe, mileage reimbursement, and an unconditional grant from Powertech to each tribe of $10,000.[55] The Oglala Sioux Tribe requested "that additional comprehensive and meaningful surveys be conducted and that other Tribes should also be involved."[56]

After this first and only face-to-face meeting between the NRC Staff and the Oglala Sioux Tribe, consultation again stalled as the NRC Staff allegedly tried to make contact with the Oglala Sioux Tribe's staff, albeit apparently without involving the Oglala Sioux Tribe's counsel.[57] Noting that in nearly 18 months, other than one face-to-face meeting, there had been no substantive progress toward agreeing upon a method to collect the missing data, the Board set up a teleconference with the parties.[58] The teleconference was held on November 7, 2016.[59] At the teleconference, the NRC Staff proposed setting up a future meeting with the Oglala Sioux Tribe to further discuss the survey and reiterated that it was the NRC Staff's position that only the Oglala Sioux Tribe could provide the necessary information on sites of cultural and historical importance to the Tribe.[60]

On January 13, 2017, the Oglala Sioux Tribe confirmed its availability for "government-to-government consultation between the Oglala Sioux Tribe and the United States,"[61] including a discussion of a cultural resource identification process, and specifically how Powertech's stated position (allegedly that it would only pay for the cost of an open-site survey) would affect the NRC Staff moving

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[53] *Id.*

[54] *Id.* at 2.

[55] Letter from Kevin Hsueh, Chief, Environmental Review Branch, Division of Waste Management and Environmental Protection, to THPOs at 1-2 (Feb. 8, 2013) (ADAMS Accession No. ML13039A336).

[56] May 19, 2016 Meeting Summary at 2.

[57] NRC Staff's Motion at 23-24; Oglala Sioux Tribe's Response at 6-7.

[58] Memorandum and Order Requesting Scheduling Information for Telephone Conference Call (Oct. 13, 2016) (unpublished); *see also, e.g.,* NRC Staff's Consultation Status Update (June 1, 2016).

[59] Tr. at 1-61 (Nov. 7, 2016).

[60] Tr. at 35 (Nov. 7, 2016).

[61] Letter from Trina Lone Hill, THPO, Oglala Sioux Tribe, to Jill Caverly, Acting Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review at 1 (Jan. 13, 2017) (ADAMS Accession No. ML17017A505).

forward with the cultural resources assessment process.[62] On January 31, 2017, the Oglala Sioux Tribe and the NRC Staff participated in such a conference call.[63] During that teleconference, the NRC Staff once again proposed an open-site survey with per diem and mileage reimbursement for those conducting the survey, and a $10,000 honorarium to be paid to the Oglala Sioux Tribe, to which the Oglala Sioux Tribe once again objected.[64] The NRC Staff also requested information from the Oglala Sioux Tribe on any "known cultural or historic resources that may be impacted" and for input regarding an alternative survey approach, a time frame, and proposed costs by mid-March.[65] The Oglala Sioux Tribe, having indicated its discontent with the open-site proposal, reminded the NRC Staff of its preference for a more comprehensive approach similar to that proposed by Makoche Wowapi/Mentz-Wilson Consultants in 2012 (Makoche Wowapi approach), and sought substantive input from the NRC Staff regarding that approach.[66] The parties departed with plans to draft a summary of the current meeting and organize another to further discuss survey alternatives.[67]

During February and March, the NRC Staff and the Oglala Sioux Tribe's counsel corresponded via email to schedule a conference call and to complete the summary of the January teleconference for submission to the Board.[68] On

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[62] *Id.*

[63] Summary of Teleconference with the Oglala Sioux Tribe Regarding the Dewey-Burdock In Situ Uranium Recovery Project (Jan. 31, 2017) (ADAMS Accession No. ML17060A260) [hereinafter January 31, 2017 Teleconference Summary].

[64] *Id.*

[65] *Id.* at 2.

[66] *Id.* at 1. On September 27, 2012, the consulting tribes presented a cultural resources survey prepared by Makoche Wowapi/Mentz-Wilson Consultants to the NRC Staff as a means to identify resources in the area. LBP-15-16, 81 NRC at 646. The Makoche Wowapi proposal was estimated to cost approximately $818,000. Makoche Wowapi Proposal at 1. The field operation would take approximately 8 weeks, and a report would be provided 60 days after completion of the field work. *Id.* The field work would require a twenty-person staff, including three "six-person crew[s] consist[ing] of a Crew Leader, a GPS Tech, a Cultural Advisor and three Field Crew members," and a Project Manager and Field Supervisor. *Id.* However, this survey proposal covered only 2637 acres of the project area, *id.,* as opposed to the NRC Staff's open-site survey which covered the full 10,000 acres of the Dewey-Burdock site when several tribes participated in 2013. Tr. at 724 (Aug. 19, 2015). When the NRC Staff received the proposal, it requested alternative methods for identification of cultural resources given the significant difference between the tribes' survey proposal and Powertech's proposal. LBP-15-16, 81 NRC at 646.

[67] January 31, 2017 Teleconference Summary at 2.

[68] *E.g.,* Email from Kellee L. Jamerson, Project Manager, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, THPO, Oglala Sioux Tribe (Feb. 23, 2017) and Email from Jeffrey C. Parsons, Counsel for the Oglala Sioux Tribe, to Kellee L. Jamerson, Project Manager, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (Feb. 27, 2017) (ADAMS Accession No. ML17060A280).

April 14, 2017, having not yet received the requested information or other input from the Oglala Sioux Tribe, the NRC Staff sent a letter to the Oglala Sioux Tribe's THPO again offering a 2-week open-site survey proposal with specific arrangements and asking the Oglala Sioux Tribe to accept or reject the survey offer by May 5, 2017.[69] After delays due to confusion over staffing for the Oglala Sioux Tribe's THPO and due to the Oglala Sioux Tribe's need to devote time and resources to respond to a United States Environmental Protection Agency permit comment period relating to the Dewey-Burdock project site, it was not until May 31, 2017, that the Oglala Sioux Tribe sent a "detailed response" to the April 14 survey invitation with its objections.[70] In that response, the Oglala Sioux Tribe

> provided significant discussion as to the types of methodologies that the Tribe expected would be included in any NRC Staff courses of action to remedy the NEPA and NHPA violations, including references to the desire to engage a contractor to facilitate and coordinate a survey, with involvement of the other Sioux tribes . . . . The Tribe also described its strong desire to involve elders in the process, as well as the need for tribal members to carefully consider the survey findings and allow for subsequent trips to the site to ensure an accurate assessment.[71]

Following this last letter, the NRC Staff concluded that after more than 2 years, "further consultation [was] unlikely to result in a mutually acceptable settlement of the dispute"[72] and that it had satisfied its consultation responsibilities through the sole in-person meeting, the one teleconference, and the correspondence that had taken place since the Partial Initial Decision was issued.[73]

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[69] Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, THPO, Oglala Sioux Tribe at 1-3 (Apr. 14, 2017) (ADAMS Accession No. ML17103A500) [hereinafter NRC Staff April 14, 2017 Letter].

[70] Letter from Trina Lone Hill, THPO, Oglala Sioux Tribe, to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (May 31, 2017) (ADAMS Accession No. ML17152A109) [hereinafter Oglala Sioux Tribe May 31, 2017 Response]; Oglala Sioux Tribe's Response at 14-15. Although the NRC Staff requested a response from the Oglala Sioux Tribe by May 31, 2017, in a May 22 email from the NRC Staff's counsel, the NRC Staff expressed it was willing to wait until May 31, 2017, for a response from the Oglala Sioux Tribe on whether it would accept or reject the NRC Staff's invitation. Email from Emily Monteith, NRC Staff's counsel, to Jeffrey C. Parsons, Oglala Sioux Tribe's counsel (May 22, 2017) (ADAMS Accession No. ML17144A240).

[71] Oglala Sioux Tribe's Response at 16.

[72] Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, THPO, Oglala Sioux Tribe at 2 (July 24, 2017) (ADAMS Accession No. ML17205A063).

[73] NRC Staff's Motion at 27.

Although the Oglala Sioux Tribe sought to engage in further consultation, noting that it "continued to believe there was significant opportunity for discussion and agreement on the survey approach,"[74] the NRC Staff claims it has sufficiently fulfilled its duties under the NHPA and NEPA. Accordingly, on August 3, 2017, the NRC Staff moved for summary disposition of Contentions 1A and 1B.[75] On September 1, 2017, Powertech filed a brief in support of the motion[76] while the Oglala Sioux Tribe and the Consolidated Intervenors filed responses opposing the motion.[77] Neither the Oglala Sioux Tribe nor the Consolidated Intervenors filed a reply to Powertech's response in support of the NRC Staff's motion.

II. STANDARDS FOR SUMMARY DISPOSITION

The standards governing summary disposition in Subpart L proceedings are set out in 10 C.F.R. § 2.1205, and "are based upon those the federal courts apply to motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure."[78] Summary disposition may be granted

> if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.[79]

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[74] Oglala Sioux Tribe's Response at 18-19 (citing Oglala Sioux Tribe's Response, Ex. 5, Email from Jeffrey C. Parsons, Counsel for the Oglala Sioux Tribe, to Emily Monteith, NRC Staff Counsel (Aug. 2, 2017)).

[75] NRC Staff's Motion. The NRC Staff's Motion included a statement of material facts in support of the motion and an affidavit of the NRC Staff Project Manager responsible for consultation efforts between the NRC Staff and the Oglala Sioux Tribe. NRC Staff's Motion, Attach. 1, NRC Staff's Statement of Material Facts to Support Motion for Summary Disposition of Contentions 1A and 1B (Aug. 3, 2017) [hereinafter NRC Staff's Motion Statement of Facts]; NRC Staff's Motion, Attach. 2, Affidavit of Kellee L. Jamerson Concerning the NRC Staff's Motion for Summary Disposition of Contentions 1A and 1B (Aug. 3, 2017).

[76] Brief of Powertech (USA), Inc. in Support of United States Nuclear Regulatory Commission Staff's Motion for Summary Disposition of Contentions 1A and 1B (Sept. 1, 2017) [hereinafter Powertech's Brief in Support].

[77] Oglala Sioux Tribe's Response; Consolidated Intervenors' Opposition to Motion for Summary Disposition of Contentions 1A and 1B (Sept. 1, 2017) [hereinafter Consolidated Intervenors' Response].

[78] *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010).

[79] 10 C.F.R. § 2.710(d)(2) (2017). Although this proceeding is a simplified hearing governed by Subpart L of the regulations, 10 C.F.R. § 2.1205(c) states that "[i]n ruling on motions for summary disposition, the presiding officer shall apply the standards for summary disposition set forth in subpart G of this part." 10 C.F.R. § 2.1205(c).

This standard establishes a two-part test: First, a board must determine if any material facts remain genuinely in dispute; second, if no such disputes remain, the board must determine if the movant's legal position is correct.[80]

The moving party carries the burden of demonstrating that summary disposition is appropriate and must explain in writing the basis for the motion.[81] To support its motion, the moving party must also "attach . . . a short and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard."[82] "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor."[83]

Alternatively, summary disposition should not be granted if it would require the board to engage in the making of "[c]redibility determinations, the weighing of the evidence, [or] the drawing of legitimate inferences from the facts."[84] Doing so would require the board to "conduct a trial on the written record by weighing the evidence and endeavoring to determine the truth of the matter."[85] Instead, the board's only role in deciding whether to grant a motion for summary disposition is to determine whether any genuine issue of material fact exists.[86]

IV. DISCUSSION

1. Contention 1B: Consultation Process Pursuant to the National Historic Preservation Act

a. Legal Standards for the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies, prior to approving any "undertaking" such as the licensing of the Dewey-Burdock project, to "take into account the effect of the undertaking on any historic property."[87] A federal agency must make a reasonable and good faith effort to identify historic properties;[88] determine whether identified properties are eligible for listing on the

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[80] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-31, 74 NRC 643, 648 (2011).

[81] *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993); 10 C.F.R. § 2.1205(a).

[82] 10 C.F.R. § 2.710(a).

[83] *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 255 (1986).

[84] *Id.*

[85] *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-16-3, 83 NRC 169, 176 (2016).

[86] *Anderson,* 477 U.S. at 249.

[87] 54 U.S.C. § 306108 (2012). "Historic property" includes any "district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." *Id.* § 300308.

[88] 36 C.F.R. § 800.4(b).

National Register of Historic Places (National Register) based on the criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found;[89] determine whether the effects will be adverse;[90] and avoid or mitigate any adverse effects.[91] The federal agency must also confer with a State Historic Preservation Officer and seek the approval of the Advisory Council on Historic Preservation (ACHP).[92]

The NHPA requires agencies to consider the unique interests and viewpoints of Native Americans in determining what to place on the National Register, such that "[p]ropert[ies] of traditional religious and cultural importance to an Indian tribe . . . may be determined to be eligible for inclusion on the National Register."[93] Section 106 also contains a role for Indian tribes as consulting parties in the NHPA process: "[I]n carrying out its responsibilities under [section 106 of the NHPA], a Federal agency shall consult with any Indian tribe . . . that attaches religious and cultural significance to [eligible] propert[ies]."[94]

The ACHP's current regulations require each agency during the consultation process to "[g]ather information from any Indian tribe . . . to assist in identifying properties, including those located off tribal lands, which may be of religious and cultural significance to them and may be eligible for the National Register."[95] Agency consultation must provide each Indian tribe with "a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects."[96] That opportunity should be both meaningful and timely.[97] Additionally, the ACHP's regulations also state that consultation efforts must "recognize the government-to-government relationship between the Federal Government and Indian tribes," and be sensitive to the needs of the tribal participants.[98]

On January 9, 2017, the NRC published its Tribal Policy Statement stating that the Agency seeks "to provide agencywide principles to achieve consistency but also encourage custom-tailored approaches to consultation and coordination

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[89] *Id.* §§ 800.4(c), 800.5.
[90] *Id.* § 800.5.
[91] *Id.* § 800.6.
[92] *Muckleshoot Indian Tribe v. U.S. Forest Serv.,* 177 F.3d 800, 805 (9th Cir. 1999).
[93] 54 U.S.C. § 302706(a).
[94] *Id.* § 302706(b).
[95] 36 C.F.R. § 800.4(a)(4).
[96] *Id.* § 800.2(c)(2)(ii)(A).
[97] Exec. Order No. 13,175, § 5, 65 Fed. Reg. 67,249, 67,250 (Nov. 6, 2000).
[98] 36 C.F.R. § 800.2(c)(2)(ii)(C).

that reflect the circumstances of each situation and the preference of each Tribal government."[99]

b. Parties' Positions

The NRC Staff argues that it is entitled to summary disposition because, although "the Section 106 consultation process did not ultimately result in a survey . . . by the Tribe, the Staff's efforts to consult with the Tribe have been both meaningful and reasonable."[100] The NRC Staff cites to several examples of its efforts to engage in meaningful government-to-government consultation with the Oglala Sioux Tribe. These include (1) extending an invitation to the President of the Oglala Sioux Tribe reiterating its commitment to consultation and inviting the Oglala Sioux Tribe to meet on a government-to-government basis; (2) holding a face-to-face meeting with members of the Oglala Sioux Tribe; (3) holding a teleconference with members of the Oglala Sioux Tribe; and (4) maintaining ongoing correspondence and contact with the Oglala Sioux Tribe to address its concerns.[101] The NRC Staff argues that, having "promptly reaffirmed its commitment to government-to-government consultation" and having provided the Oglala Sioux Tribe with both an in-person meeting and a single teleconference, as well as the opportunity to offer concerns and objections to survey proposals in writing, it has diligently and proactively engaged in government-to-government consultation with the Oglala Sioux Tribe.[102]

As an initial matter, the Oglala Sioux Tribe argues in response that Contention 1B is not susceptible to summary disposition because the facts the NRC Staff relies on as support are in dispute.[103] Specifically, the Oglala Sioux Tribe contends that its own account of the past 2 years materially differs from that of the NRC Staff.[104] Moreover, the Oglala Sioux Tribe asserts that, even accepting the NRC Staff's characterization of the events over the past 2 years, the NRC Staff once again has not provided a meaningful opportunity for consultation due to a lack of substantive discussion.[105] The Oglala Sioux Tribe contends that the NRC Staff has not made a good faith effort to engage in government-to-government consultation because the NRC Staff has (1) been unresponsive over the past 2 years;[106] (2) remained inflexible in its engagement in identifying a potential

[99] NRC Tribal Policy Statement, 82 Fed. Reg. 2402, 2416 (Jan. 9, 2017).
[100] NRC Staff's Motion at 27-28.
[101] *See id.* at 20-27.
[102] *Id.* at 28.
[103] Oglala Sioux Tribe's Response at 2-3.
[104] *Id.* at 3.
[105] *Id.* at 29.
[106] *Id.* at 27.

cultural resource survey method;[107] (3) engaged in "behind the scenes strategy coordination with Powertech," focusing its resources on "driving the negotiations into an unworkable position . . . instead of reasonably negotiating with the Tribe;"[108] and (4) "unilaterally abandon[ed] the [consultation] process with no coherent explanation or reasoning and proceed[ed] [to] immediately [file] for summary disposition," rather than carrying out the consultation in "a manner sensitive to the concerns and needs" of the Oglala Sioux Tribe.[109] The Oglala Sioux Tribe complains that, despite these behaviors on the NRC Staff's part, the NRC Staff now "paint[s] the Tribe as unresponsive and solely to blame" for the failure to find an agreeable means to conduct the survey.[110] Lastly, the Oglala Sioux Tribe asserts that the burden to comply with the NHPA lies exclusively with the NRC Staff, not with the Oglala Sioux Tribe.[111] The Tribe sees the NRC Staff's assertion that "adequate cultural resources information can only be obtained by the Tribe itself" as a means to push the burden onto the Oglala Sioux Tribe and to avoid its own NHPA responsibilities.[112]

Powertech, in support of the NRC Staff's motion, incorporates each of the NRC Staff's arguments, and adopts the NRC Staff's statement of material facts.[113] Further, Powertech argues that 7 years of consultation has now occurred, and "enough time and opportunities for the Tribe have passed the point in time where the 'reasonableness' of continuing the process no longer exists," and that since this Board "prescribed direct, singular conduct with the Tribe," which the NRC Staff has provided, the NHPA obligations have been satisfied.[114] The Consolidated Intervenors, on the other hand, adopt the evidence, authority, and arguments presented by the Oglala Sioux Tribe's response and support the Oglala Sioux Tribe's opposition to the NRC Staff's motion.[115] The Consolidated Intervenors argue that "a fundamental and genuine dispute continues to exist due to the NRC Staff's failure to communicate or negotiate in good faith with the Tribe or provide any reasonable proposal that contains any measure of compromise to address the Tribe's oft-stated reasonable concerns."[116] The Consolidated Intervenors also object to both the form and substance of the consultation process. As to form, they contend that the use of teleconferenc-

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[107] *Id.*
[108] *Id.* at 30.
[109] *Id.* at 31.
[110] *Id.* at 27.
[111] *Id.* at 27, 31.
[112] *Id.* at 29.
[113] Powertech's Brief in Support at 9.
[114] *Id.* at 10, 12 & n.10.
[115] Consolidated Intervenors' Response at 1.
[116] *Id.*

ing or video communication does not constitute consultation, and that the use of such technology shows "callous disregard for tribal cultural mores."[117] As to substance, Consolidated Intervenors assert that the NRC Staff lacked good faith by continually offering the Oglala Sioux Tribe the same open-site survey proposal and failing to provide an explanation for why the Makoche Wowapi approach was not reasonable.[118] We address the arguments from both Powertech and Consolidated Intervenors in conjunction with addressing those raised by the NRC Staff and the Oglala Sioux Tribe.

c. Board Determination Regarding Summary Disposition for Contention 1B

First, we address the Oglala Sioux Tribe's argument that summary disposition should not be granted on Contention 1B because material facts remain in dispute. Although the Oglala Sioux Tribe and the NRC Staff characterize the past 2 years differently, we conclude that the material aspects of the consultation process are not in dispute. The key undisputed material facts are that between the NRC Staff and the Oglala Sioux Tribe one in-person meeting occurred, one teleconference occurred, and numerous written letters and emails were sent. In the meeting, teleconference, and correspondence, the Oglala Sioux Tribe provided meaningful, substantive input regarding both the NRC Staff's proposed open-site survey and the Oglala Sioux Tribe's own proposal to base the survey on the Makoche Wowapi approach. Additionally, the Oglala Sioux Tribe was afforded a reasonable opportunity to offer alternative approaches for a cultural resources survey. We also conclude that these undisputed factual aspects of the consultation process provide a sufficient basis for the Board to rule on this aspect of the NRC Staff's motion for summary disposition as a matter of law.[119]

To be sure, the record before the Board once more presents a close call as to whether the NRC Staff provided a meaningful opportunity under the NHPA for the Oglala Sioux Tribe to consult concerning the Dewey-Burdock project site. In this regard, the Board finds helpful the recent decision by the licensing board in the *Crow Butte* proceeding regarding what constitutes a meaningful opportunity under NHPA. In that proceeding, which factually parallels this case in many respects, that licensing board also faced the question whether the NRC Staff had satisfied its consultation obligations under the NHPA in the way the NRC Staff worked with the Oglala Sioux Tribe regarding the renewal of the ISR license for the Crow Butte facility in Nebraska.[120] The *Crow Butte* board

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[117] *Id.* at 14, 22.

[118] *E.g., id.* at 2, 22-23.

[119] *See* 10 C.F.R. § 2.710(d)(2).

[120] *See Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-16-7, 83 NRC 340 (2016), *appeals pending.*

found that while the NRC Staff's initial efforts were inadequate to satisfy the NHPA consultation requirement, by finally offering an in-person meeting with high-level NRC management officials, the NRC Staff had met its obligations.[121]

Here, as in *Crow Butte,* after a long-standing strained consulting relationship, the NRC Staff attempted to rectify its errors (albeit because we ruled it had to do so) by providing the Oglala Sioux Tribe with a true government-to-government consultation effort. Over the past 2 years, the NRC Staff continued to offer various opportunities for the Oglala Sioux Tribe to express tribal concerns, provide information, and bring forward an alternative survey proposal. The "NHPA does not empower an Indian tribe to delay or stall a licensing proceeding"[122] just because the tribe dislikes the possible outcome of the consultation process. Further, as is the case with the NEPA process, section 106 does not dictate an end result. Rather, the NHPA places a burden on the NRC Staff to provide an opportunity to consult without requiring the NRC Staff to come to an agreement with a consulting tribe. While the NHPA does require the parties to consult in good faith,[123] it does not require the NRC Staff to select a methodology it believes is unreasonable because a tribe prefers that method. Nor does the NHPA require the NRC Staff to reject a methodology it believes to be reasonable because a tribe objects to it. The NHPA simply affords a tribe a meaningful opportunity to consult on federal actions that affect properties of religious or cultural significance to the tribe.[124]

In the Board's Partial Initial Decision, we stated that the Oglala Sioux Tribe was "entitled to a meaningful, face-to-face, government-to-government consultation session with the NRC Staff regarding this specific project."[125] Although, as the Commission clarified, this was not the only way to accomplish the NHPA's consultation obligations, the NRC Staff nonetheless followed our suggestion and provided the Oglala Sioux Tribe with a one-on-one, face-to-face meeting in May 2016. As the *Crow Butte* board emphasized, NRC Staff leadership must attend any meeting alongside Oglala Sioux Tribal leadership for such a meeting to constitute government-to-government consultation.[126] The May 2016 Pine Ridge meeting was attended by high-level NRC Staff project managers and tribal representatives holding sufficiently "similar levels of authority."[127] In addition, the NRC Staff held a second one-on-one teleconference on January 31, 2017, giving the Oglala Sioux Tribe another opportunity to consult meaning-

[121] *Id.* at 381-83.
[122] *Id.* at 383.
[123] 36 C.F.R. § 800.4(b)(1); 82 Fed. Reg. at 2402, 2416.
[124] 54 U.S.C. § 302706 (2012).
[125] LBP-15-16, 81 NRC at 656.
[126] *Crow Butte,* LBP-16-7, 83 NRC at 375.
[127] *Id.*

fully. Having followed the guidance provided to it by this Board in its Partial Initial Decision, we find that this series of opportunities to consult is minimally sufficient to fulfill the requirements of section 106 of the NHPA.

Arguably, much of the rest of the NRC Staff's consultation efforts, whether by email or letters to the Oglala Sioux Tribe, were focused on form over substance, or quantity over quality. As stated in *Crow Butte,* the "NRC Staff has been much better served when, instead of just checking the boxes to meet some procedural minimum, it has worked with Indian tribes to comply with the substance of NEPA and the NHPA."[128] Nonetheless, we find that the NRC Staff's efforts, particularly in its engagement with the Oglala Sioux Tribe on a one-on-one basis through the May 2016 face-to-face meeting and the January 2017 teleconference, are sufficient to satisfy the NHPA's requirement that the NRC Staff afford the Oglala Sioux Tribe a meaningful opportunity to consult on federal actions that may affect properties of religious or cultural significance, as well as to advise the agency on identification and evaluation of such properties, and to participate in the resolution of any possible adverse consequences.[129]

Accordingly, finding there to be no material facts in dispute regarding Contention 1B and having determined relative to the merits of the contention that the NRC Staff is entitled to a ruling in its favor regarding the substance of that contention as a matter of law, we grant the NRC Staff's summary disposition motion as to Contention 1B.

2. Contention 1A: The NRC Staff's National Environmental Policy Act Responsibility

a. Legal Standards for the National Environmental Policy Act

NEPA has two principal objectives. First, it seeks to ensure that an agency considers every significant aspect of the environmental impact of a proposed action.[130] Second, it is intended to guarantee that the agency informs the public that it has, in fact, considered environmental concerns in its decision-making process.[131] To effect these cardinal goals, NEPA directs agencies to prepare a detailed environmental impact statement for proposed actions "significantly affecting the quality of the human environment."[132] Adverse effects that must be evaluated include "ecological . . . , aesthetic, historic, cultural, economic, social,

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[128] *Id.* at 371.

[129] 54 U.S.C. § 302706 (2012); 36 C.F.R. § 800.2(c)(2)(ii)(A).

[130] *Baltimore Gas & Elec. Co. v. NRDC,* 462 U.S. 87, 97 (1983).

[131] *Id.*

[132] 42 U.S.C. § 4332(C) (2012).

or health" effects.[133] And in assessing any adverse effects, NEPA requires that an agency take a "hard look" at the environmental consequences of a planned action.[134]

NEPA does not, however, require agencies to analyze every conceivable aspect of a proposed project.[135] Rather, NEPA's requisite "hard look" is subject to a "rule of reason."[136] This means that agencies need not consider risks that are "remote and speculative" or events that have a very low probability of occurring.[137] Moreover, the Commission recognizes that an environmental impact statement is not a "research document," and, in assessing foreseeable impacts, there "will always be more data [that] could be gathered," so that agencies "must have some discretion to draw the line and move forward with decision-making."[138] In assessing these impacts, the agency is not required to use "the best scientific methodology" or study phenomena "for which there are not yet standard methods of measurement or analysis."[139] Rather, agencies are free to "select their own methodology as long as that methodology is reasonable."[140]

When an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment, "the agency shall always make clear that such information is lacking."[141] Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the environmental impact statement.[142] However, if the costs of obtaining the information are exorbitant, the agency must include in the FSEIS:

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment,

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[133] 40 C.F.R. § 1508.8. The NRC is not bound by Council on Environmental Quality regulations; however, the regulations are entitled to considerable deference. LBP-15-16, 81 NRC at 636.

[134] *Marsh v. Oregon Nat. Res. Council,* 490 U.S. 360, 374 (1989).

[135] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

[136] *See, e.g., NRDC v. Morton,* 458 F.2d 827, 834 (D.C. Cir. 1972).

[137] *Limerick Ecology Action, Inc. v. NRC,* 869 F.2d 719, 745 (3d Cir. 1989).

[138] *Pilgrim,* CLI-10-11, 71 NRC at 315 (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)).

[139] *Id.* (quoting *Winthrop,* 535 F.3d at 12-13).

[140] *Id.* at 316 (quoting *Winthrop,* 535 F.3d at 13).

[141] 40 C.F.R. § 1502.22.

[142] *Id.* § 1502.22(a).

> and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[143]

Finally, in an NRC adjudicatory hearing, even if a board finds the environmental impact statement inadequate in some respects, the board's findings, as well as the adjudicatory record, "become, in effect, part of the [FSEIS]."[144] Thus, a board's ultimate NEPA judgments are made on the basis of the entire adjudicatory record in addition to the NRC Staff's FSEIS.[145]

b. Parties' Positions

The NRC Staff asserts that it is entitled to summary disposition on Contention 1A because, even though it has not obtained information on the Sioux Nation's cultural, religious, and historic resources, it has satisfied NEPA's "hard look" standard because it "made reasonable efforts" to obtain the missing information.[146] According to the NRC Staff, despite its reasonable efforts to obtain information on the Oglala Sioux Tribe's cultural, religious, and historic resources, it is no closer to obtaining information on the Oglala Sioux Tribe's cultural resources than it was when the Board issued its Partial Initial Decision.[147] This is so, the NRC Staff maintains, because while the NRC Staff has provided the Oglala Sioux Tribe with multiple opportunities to provide this information, the Oglala Sioux Tribe has not availed itself of these opportunities.[148] Thus, the NRC Staff claims that its inability to obtain this information stems from the Oglala Sioux Tribe's refusal to cooperate, and not from the NRC Staff's failure to attempt to obtain the information.[149] According to the NRC Staff, because NEPA's rule of reason provides agencies with some discretion to "draw the line and move forward with decisionmaking,"[150] its reasonable efforts to obtain information on the Oglala Sioux Tribe's cultural resources satisfies its NEPA obligation.[151]

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[143] *Id.* § 1502.22(b).

[144] *In re Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 53 (2001).

[145] *Louisiana Energy Services, L.P.* (National Enrichment Facility), LBP-05-13, 61 NRC 385, 404 (2005).

[146] NRC Staff's Motion at 34.

[147] *Id.* at 35.

[148] *Id.*

[149] *Id.*

[150] *Id.* at 34.

[151] *Id.* at 36.

The Oglala Sioux Tribe contends that the NRC Staff has yet to satisfy its NEPA burden. Citing the Board's conclusion in its Partial Initial Decision that NEPA's hard look requirement cannot be satisfied without additional analysis "as to how the Powertech project may affect the Sioux Tribes' cultural, historical, and religious connections with the area," the Oglala Sioux Tribe argues that "[t]he Board need go no further than to hold that the NRC Staff has provided no evidence of any NEPA analysis that could cure the FSEIS deficiencies."[152] Further, the Oglala Sioux Tribe asserts that the NRC Staff, by trying to place the focus on the Oglala Sioux Tribe's refusal to participate in the open-site survey, is ignoring the fact it is the NRC Staff, not the Oglala Sioux Tribe, that bears the burden of satisfying NEPA.[153] The Oglala Sioux Tribe argues that its failure to agree with the NRC Staff on an acceptable method for assessing cultural resources does not obviate the NRC Staff's "independent duty to conduct NRC's cultural resources impact analysis."[154] Moreover, the Oglala Sioux Tribe maintains that the NRC Staff "is free to select whatever course of action it deems appropriate to address the [FSEIS] deficiencies,"[155] so long as its chosen method utilizes a "systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences."[156] The Oglala Sioux Tribe further disputes the NRC Staff's assertion that NEPA's rule of reason authorizes the NRC Staff to, under any circumstances, "neglect to analyze a foreseeable impact from its actions, such as impacts to cultural resources at issue here."[157]

Again, Powertech concurs with the NRC Staff that there is no material fact showing a genuine dispute that would prevent a grant of this aspect of the NRC Staff's motion for summary disposition. Like the NRC Staff, Powertech blames the Oglala Sioux Tribe for the fact that the NRC Staff has not obtained any information on the Native American cultural resources missing from the FSEIS. According to Powertech, "the satisfaction of the Licensing Board's LBP-15-16 [NEPA] directive is inextricably linked to satisfaction of its directive for compliance with the NHPA. . . . [T]he pivotal reason that no amicable solution can be reached . . . is that the Tribe will not even participate in the *identification* phase of this process."[158] For their part, the Consolidated Intervenors list eight disputed material facts[159] and note there has been "no site visit, no involvement

[152] Oglala Sioux Tribe's Response at 33.
[153] *See id.* at 34.
[154] *Id.*
[155] *Id.* at 33 (quoting CLI-16-20, 84 NRC at 251).
[156] *Id.* at 34 (quoting 42 U.S.C. § 4332(A) (1975)).
[157] *Id.* at 38.
[158] Powertech's Brief in Support at 14.
[159] Consolidated Intervenors' Response at 22-23.

of tribal elders, no ethnographic studies" since the Partial Initial Decision.[160] They further echo the Oglala Sioux Tribe's claim that it is the NRC Staff's responsibility to select a methodology for assessing tribal cultural resources that is "scientifically based . . . involving knowledgeable persons within the seven Bands of the Lakota of the potentially impacted area."[161] Additionally, citing to testimony from the evidentiary hearing in this proceeding, the Consolidated Intervenors argue that "it is not possible to accomplish an adequate [tribal cultural resource] survey in one limited open-site visit."[162] We address the arguments from both Powertech and Consolidated Intervenors in conjunction with addressing those raised by the NRC Staff and the Oglala Sioux Tribe.

c. Board Determination Regarding Summary Disposition of Contention 1A

In its Partial Initial Decision, the Board found that the NRC Staff failed to satisfy its NEPA obligation to protect and preserve tribal cultural, religious, and historical sites in the Dewey-Burdock project site by providing an adequate analysis of the impacts of the project on the cultural resources "of the Oglala Sioux Tribe and the majority of the other consulting Native American tribes."[163] In particular, we concluded that, to fulfill its NEPA obligation relative to the cultural resources of Native American tribes, "the NRC Staff must conduct a study or survey of tribal cultural resources before granting a license."[164] On the record now before us, we still are unable to conclude that the NRC Staff has fulfilled this obligation to conduct such a study or survey because (1) the NRC Staff has yet to conduct any such study or survey — and thus the FSEIS deficiencies remain; and (2) there remains a material factual dispute as to whether the NRC Staff's chosen methodology for obtaining information on the tribal cultural resources was reasonable.

As the Commission noted in its review of the Partial Initial Decision, the NRC Staff is "free to select whatever course of action it deems appropriate to address the deficiencies [in the FSEIS], including, but not limited to further government-to-government consultation."[165] On April 14, 2017, the NRC Staff selected its methodology for assessing the FSEIS deficiencies when it invited the Oglala Sioux Tribe to participate in an open-site survey of the Dewey-Burdock project site.[166] The open-site survey detailed in the April 14, 2017 invitation to the

[160] *Id.* at 1.
[161] *Id.* at 7.
[162] *Id.*
[163] LBP-15-16, 81 NRC at 655.
[164] *Id.* at 653.
[165] CLI-16-20, 84 NRC at 251.
[166] NRC Staff April 14, 2017 Letter at 1.

Oglala Sioux Tribe is effectively identical to the open-site survey that the Oglala Sioux Tribe has consistently objected to and declined to participate in since the outset of this proceeding.[167] Although NEPA permits the NRC Staff to "select their own methodology as long as that methodology is reasonable,"[168] the record before us indicates there is a material factual dispute as to the reasonableness of the terms and details of the NRC Staff's proposed open-site survey.[169]

The open-site survey, as proposed by the NRC Staff, includes the following terms: (1) the Dewey-Burdock project site will be open to the Oglala Sioux Tribe for a period of 2 weeks to conduct the survey; (2) the Oglala Sioux Tribe may send up to three representatives to participate in the survey; (3) Powertech will pay for lodging and per diem for the three participating tribal representatives; (4) Powertech will pay a $10,000 honorarium to the Oglala Sioux Tribe for its participation; (5) the tribal representatives will receive a safety briefing and be required to sign a release of liability; (6) daily transportation will be provided and an NRC Staff member will be present each day of the survey; and (7) any tribal representatives that encounter potentially sensitive properties or features may request that Powertech use a GPS unit to record the boundaries of the identified feature.[170] Additionally, the open-site survey proposal requires the Oglala Sioux to "provide a written report to the NRC staff within 30 days following the survey, or other time as agreed upon between the Oglala Sioux Tribe and the NRC staff."[171]

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[167] *See* NRC Staff's Motion at 33-36.

[168] *Pilgrim,* CLI-10-11, 71 NRC at 316. The NRC Staff also relies on the Commission's decision in *Pilgrim* for the proposition that because the Oglala Sioux Tribe will not cooperate with the open-site survey, the NRC Staff is entitled to "draw the line and move forward with decisionmaking." NRC Staff's Motion at 34. However, the *Pilgrim* decision only found the NRC Staff has some discretion in determining how much data to collect before issuing a decision; it does not state whether the NRC Staff has discretion not to collect essential data. Nothing in *Pilgrim* convinces us that the NRC Staff has discretion to forgo the collection of data necessary for a NEPA analysis without providing a sufficient justification for the information's absence.

[169] The Oglala Sioux Tribe has not specifically framed its dispute with the NRC Staff's chosen methodology as a factual matter. Nonetheless, the Oglala Sioux Tribe made clear in its response, as it did at the evidentiary hearing preceding the Partial Initial Decision, that it does not consider the open-site survey to be a reasonable approach for assessing tribal cultural resources. *See* Oglala Sioux Tribe's Response at 35-37, 47; *see also* Tr. at 800-07 (Aug. 19, 2014). The Board has the authority to deny a motion for summary disposition if it finds there is a material fact in dispute, even if the opposing party fails to make any claim there is a material fact in dispute. *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753-54 (1977) (discussing Supreme Court precedent and ruling that under this standard a dispositive motion that does not establish the absence of a genuine dispute must be denied, even if no opposing evidentiary matter is presented).

[170] NRC Staff April 14, 2017 Letter at 1-2.

[171] *Id.* at 2.

The Oglala Sioux Tribe objects to reasonableness of this proposal on several grounds. First, the Oglala Sioux Tribe alleges that the open-site survey, as proposed, lacks scientific integrity. In its May 31, 2017 response to the NRC Staff's April 14, 2017 invitation to participate in the open-site survey, the Oglala Sioux Tribe noted that, since 2011, the Lakota Sioux Tribes have objected to the NRC Staff using any survey method "that lacks identification of acceptable protocols and methodologies for cultural site identification."[172] The May 31, 2017 response also specifically cited to a February 20, 2013 letter sent from multiple tribes to the NRC Staff stating that they objected to the open-site survey because it lacked "a proper methodological framework to conduct the necessary cultural resources survey."[173] In its May 31, 2017 response, the Oglala Sioux Tribe asserted that it believed the scientific integrity of the NRC Staff's proposed survey could be addressed if the NRC Staff hired "a contractor(s) with the necessary experience, training, and cultural knowledge to carry out and facilitate the survey."[174]

Second, the Oglala Sioux Tribe objects to several of the terms of the NRC Staff's proposed open-site survey. Specifically, the Oglala Sioux Tribe objects to (1) the number of tribal members invited to participate; (2) the length of time provided for the survey; and (3) which tribes have been invited to participate in the survey. With regard to the number of tribal members invited to participate, the Oglala Sioux Tribe noted in its May 31, 2017 response to the NRC Staff's April 14, 2017 letter that, "specific protocols and methodologies that should be incorporated into any competent cultural survey approach," include involving "tribal elders, spiritual advisors, [and] spiritual leaders."[175] This view is reflected in the objections the Oglala Sioux Tribe had to the terms of the open-site survey proposed by the NRC Staff preceding the Partial Initial Decision. During the evidentiary hearing, the Oglala Sioux Tribe stated that, in conducting a competent survey, it would want to involve its "elders, [its] traditional medicine people, spiritual leaders, [and] historians."[176] Furthermore,

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[172] Oglala Sioux Tribe May 31, 2017 Response at 2.

[173] *Id.*

[174] *Id.* at 4. Notably, although the Oglala Sioux Tribe has suggested that the NRC Staff hire a contractor to conduct and coordinate the survey, it has indicated that the NRC Staff could use a qualified staff member to coordinate the survey. *See* Oglala Sioux Tribe's Response at 37 (noting that "other agencies routinely rely on qualified agency social scientists as trained ethnographers to carry out the necessary surveys and analysis, with significant input, participation, and consultation from the relevant tribes, without any mandate that a certain tribe conduct the survey (citing *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.,* No. 2:14-cv-00226-APG-VCF, No. 2:14-cv-00228-APG-VCF, 2017 WL 3667700, at *54-55 (D. Nev. Aug. 23, 2017))).

[175] *Id.* at 4-5 (quoting Transcript of Proceedings, *Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, Neb.) at 2244-45 (ADAMS Accession No. ML15244B278) [hereinafter *Crow Butte* Tr.]).

[176] Tr. at 801 (Aug. 19, 2014).

the Oglala Sioux Tribe specifically rejected the NRC Staff's proposal to invite three individuals per tribe to participate in the survey, stating that "[e]ach family [in the Tribe] has different ideas of where [cultural resources] occur within the geography of the Black Hills. Each family has different areas that they hold sacred. . . . That's more than three per tribe."[177]

Regarding the length of time for the survey, the Oglala Sioux Tribe asserts that a 2-week period for the survey is inadequate to properly assess the potential impacts to tribal cultural resources. In its May 31, 2017 response, the Oglala Sioux Tribe stated that the Dewey-Burdock project site must be open to its tribal members "for the period that is required to do a proper identification."[178] In support of this objection, the Oglala Sioux Tribe cited to the testimony of the NRC Staff's witness, Dr. Paul Nickens, in *Crow Butte,* wherein he estimated that it could potentially take 8 to 9 months to conduct a realistic tribal cultural resource survey involving all of the relevant tribes.[179]

Lastly, the Oglala Sioux Tribe objected to the fact that the NRC Staff's April 14, 2017 proposed open-site survey only invited the Oglala Sioux Tribe to participate and did not coordinate the survey among the several Lakota Sioux Tribes. In its May 31, 2017 response to the NRC Staff's invitation, the Oglala Sioux Tribe emphasized that "there must be an effort to coordinate the several different Lakota Sioux Tribes before designing and conducting a cultural resource survey."[180] The Oglala Sioux Tribe expounded that while it understood that the NRC Staff "is under an obligation to conduct consultation meetings with the Oglala Sioux Tribe specifically . . . coordination of a cultural resources survey must include the other Lakota Sioux tribal governments . . . in order to be competent in its analysis of Lakota Sioux cultural resources."[181] The Oglala Sioux Tribe's view on the proper scope of the survey is not new; during the evidentiary hearing, the Oglala Sioux Tribe stated that representation from one Sioux Tribe is insufficient for an adequate cultural resource survey, and would instead require participation from all of the Lakota Tribes.[182] The Oglala Sioux Tribe raised this point again during the January 31, 2017 teleconference between the Tribe and the NRC Staff, wherein the Oglala Sioux Tribe expressed "its desire to include other interested Tribes in the development of the survey

[177] Tr. at 850 (Aug. 19, 2014).
[178] Oglala Sioux Tribe May 31, 2017 Response at 2.
[179] *Crow Butte* Tr. at 2276-78.
[180] Oglala Sioux Tribe May 31, 2017 Response at 3-4.
[181] *Id.* at 4.
[182] Tr. at 815-16 (Aug. 19, 2014).

approach and recommended that those Tribes participate in conducting the tribal survey."[183]

We conclude that these points — specifically, the Oglala Sioux Tribe's challenge to (1) the scientific integrity and lack of a trained surveyor or ethnographer coordinating the survey; (2) the number of tribal members invited to participate in the survey; (3) the length of time provided for the survey; and (4) the tribes invited to participate in the survey — establish a significant material factual dispute as to the reasonableness of the NRC Staff's proposed terms for an open-site survey to assess the identified deficiencies in this FSEIS.

That being said, it certainly is not too late for the NRC Staff to consider an alternative method or framework for assessing impacts to tribal cultural resources and, if appropriate, to move for summary disposition if it opts for an alternative to its currently proposed open-site survey. At times in the past 2 years, the NRC Staff has appeared to show some degree of flexibility on what method it would use to assess impacts to tribal cultural resources. In particular, during the January 31, 2017 teleconference between the Oglala Sioux Tribe and the NRC Staff, the NRC Staff indicated it would consider the Oglala Sioux Tribe's perspective on "any other methodologies that they may wish to put forward for the provision of information on these cultural resources' importance to the [Oglala Sioux] Tribe."[184] Likewise, the Oglala Sioux Tribe previously expressed its willingness to consider participating in "any methodology that is appropriate" to assess tribal cultural resources.[185] Yet, despite both parties' stated flexibility, the NRC Staff has never actually proposed any methods of addressing the FSEIS deficiencies other than an open-site survey. Indeed, the NRC Staff's April 14, 2017 letter to the Oglala Sioux Tribe proposed yet again to employ the same

[183] January 31, 2017 Teleconference Summary at 1. The Oglala Sioux Tribe disputes the reasonableness of the proposed open-site survey because it does not coordinate the survey among the several Lakota Sioux Tribes, of which the Oglala Sioux is one. This may not have been an obvious point of contention when the NRC Staff originally proposed the open-site survey in 2013; however, this concern clearly contributes to the material factual dispute that is now evident. When the NRC Staff first chose the open-site survey as its method for assessing tribal cultural resources in 2013, it invited all of the potentially impacted tribes to participate. LBP-15-16, 81 NRC at 648. Thus, the reasonableness of the 2013 proposed open-site survey in terms of which tribes were invited to participate would not have been in dispute. Nonetheless, as our Partial Initial Decision noted, the FSEIS analysis based on that survey is deficient for failing to address Sioux Tribe cultural resources generally. *Id.* at 655. Thus, to resolve the identified FSEIS deficiencies, the reasonableness of the NRC Staff's chosen methodology, in part, depends on its ability to assess all of the Lakota Sioux cultural resources missing in the FSEIS.

[184] Tr. at 54 (Nov. 7, 2016).

[185] Tr. at 44-45 (Nov. 7, 2016).

open-site survey that the Oglala Sioux Tribe has consistently rejected since the outset of this proceeding.[186]

This stands in sharp contrast to the fact that on several occasions the NRC Staff has acknowledged there are various available methods for assessing tribal cultural resources. For instance, Appendix A of the FSEIS includes a letter sent to the Oglala Sioux Tribe from the NRC Staff in which the NRC Staff acknowledged:

> [T]here are additional methods for identifying potential properties of traditional religious and cultural importance to tribes . . . . Alternatives include opening the site to interested tribal specialists over a period of several weeks with payments to be made to the individual tribes, or seeking ethnohistorical and ethnographic information from tribal specialists in interviews at tribal headquarters.[187]

Furthermore, in the evidentiary hearing for the *Crow Butte* license renewal proceeding, the NRC Staff's own witness, Nathan Goodman,[188] noted that while the NRC Staff chose to evaluate tribal cultural resources through the open-site survey approach, there are other methods to identify tribal cultural resources.[189] This was echoed by the NRC Staff's other witness, Dr. Nickens,[190] who declared:

> In my experience, probably the best [tribal cultural resource] survey approach is to involve Tribal Elders, wherein if it's one tribe or a group of tribes would supply elders of their choice and then there would be a facilitator, something along the lines of a cultural anthropologist who would accompany the elders and provide logistics support, documentation, recording support, report preparation if that were necessary.[191]

We again emphasize that under NEPA, the NRC Staff is not required to use "the best scientific methodology"[192] to assess environmental impacts, but it *is* required to use a reasonable methodology. Thus, the NRC Staff may

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[186] *See* NRC Staff April 14, 2017 Letter.

[187] Office of Federal and State Materials and Environmental Management Programs, Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Final Report, NUREG-1910, Vol. 2, App. A at A-107 (Supp. 4 Jan. 2014) (ADAMS Accession No. ML14024A478).

[188] Mr. Goodman was the Lead Environmental Project Manager for the Crow Butte license renewal. *Crow Butte,* LBP-16-7, 83 NRC at 362.

[189] *Crow Butte* Tr. at 2021-22.

[190] Dr. Nickens was a Senior Cultural Resources Specialist contracted by the NRC Staff to provide cultural resource expert support for Mr. Goodman. *Crow Butte,* LBP-16-7, 83 NRC at 362.

[191] *Crow Butte* Tr. at 2023.

[192] *Pilgrim,* CLI-10-11, 71 NRC at 315.

wish to consider available alternatives to determine if there is a reasonable method, other than its current open-site survey proposal, capable of yielding the information on the cultural resources of the Lakota Sioux Tribes. Exploration of such alternatives could result in an agreement among the parties on a survey methodology, the major bone of contention among them, so as to permit the resolution of Contention 1A.

We note, however, that if the NRC Staff chooses a methodology that does not include complete information about adverse effects on the Tribe's cultural resources, the NRC Staff would need to include an explanation that satisfies the requirements of 40 C.F.R. § 1502.22. As our Partial Initial Decision made clear, the FSEIS does not contain an analysis of Sioux tribal cultural resources even though this information is essential to determining "potentially necessary mitigation measures."[193] As noted *supra,* section 1502.22(b) states that, if information "is essential to a reasoned choice among alternatives, and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement."[194] Given the Oglala Sioux Tribe's assertions and the NRC Staff's own evidentiary input cited above, if the NRC Staff chooses a methodology, such as the open-site survey that does not yield information on the identified deficiencies in the FSEIS, the NRC Staff arguably would need to provide an explanation that the alternatives for obtaining the missing information were cost-prohibitive.

If the NRC Staff were to determine that its viable options for obtaining the essential information are cost-prohibitive, 40 C.F.R. § 1502.22(b)(3) and (4) would still require that the NRC Staff set forth a "summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment,"[195] and "the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community."[196] In other words, in these circumstances, if the NRC Staff concludes there is no affordable alternative to the open-site survey for assessing the missing Native American cultural resources, it must at a minimum provide an explanation of this type to satisfy NEPA that is specific to the cultural resources of the Oglala Sioux Tribe and the other Native American tribes currently missing from the FSEIS.[197]

Yet, if the NRC Staff ultimately cannot provide an explanation of the adequacy of its chosen survey method that evidences appropriate factual and legal support sufficient for a successful dispositive motion — a motion the NRC Staff

[193] LBP-15-16, 81 NRC at 655.
[194] 40 C.F.R. § 1502.22(b).
[195] *Id.* § 1502.22(b)(3).
[196] *Id.* § 1502.22(b)(4).
[197] *See* LBP-15-16, 81 NRC at 655.

will have an additional opportunity to provide per the schedule we establish below[198] — the Board has concluded that, as generally the case in the face of an unsuccessful summary disposition motion, the appropriate next step will be to hold an evidentiary hearing on the reasonableness of the open-site survey, the scheduling details of which we discuss, *infra.*

Accordingly, finding there remains a material factual dispute regarding Contention 1A, we deny the NRC Staff's summary disposition motion as to Contention 1A.

3. NRC Staff's and Oglala Sioux Tribe's Continuing Obligations and Further Procedures

a. Errors in Consultation Process to Date

In addition to our findings on the NRC Staff's Motion for Summary Disposition, we are mindful that there are cross-allegations in the pleadings that the NRC Staff and Oglala Sioux Tribe generally conducted themselves poorly in their communications. The Oglala Sioux Tribe alleges that the NRC Staff violated its obligations pursuant to 10 C.F.R. Part 2. We outline these communications issues below.

(i) FAILURE TO INCLUDE COUNSEL

Over the past 2 years, there were several periods during which very little communication occurred between the NRC Staff and the Oglala Sioux Tribe. The NRC Staff has alleged that it made multiple attempts to contact the Oglala Sioux Tribe without receiving any response during the periods from September 24, 2015, to November 30, 2015, and during August 2016 and December 2016. However, it appears that during that time the NRC Staff did not include the Oglala Sioux Tribe's counsel in these attempted communications, and instead contacted Oglala Sioux Tribal staff directly.

In an effort to show that the Oglala Sioux Tribe did not avail itself of its opportunity to participate in the consultation process, the NRC Staff has pointed out that during the period of September 2015 to November 2015 the NRC Staff "attempted unsuccessfully to reach the Tribe's THPO by telephone and email to coordinate dates for the government-to-government meetings."[199] Yet, having failed to receive any response from the THPO, the NRC Staff did not contact

[198] Because the Board has concluded that there is a dispute of material fact on the terms of the NRC Staff's currently proposed open-site survey, a successful dispositive motion for summary disposition would present, at a minimum, a difference that would arguably eliminate the dispute of fact.

[199] NRC Staff's Motion at 21.

the Oglala Sioux Tribe's counsel until 2 months of silence had passed.[200] Once copied on the emails, counsel for the Oglala Sioux Tribe responded relatively quickly and requested, given that "this matter is part of an ongoing adjudicatory matter and in an effort to ensure efficient communication between the parties," that all communication should include the Oglala Sioux Tribe's counsel.[201]

A similar situation again arose during August 2016 and December 2016. During the month of August 2016, the NRC Staff alleges it made several attempts to contact the Oglala Sioux Tribe via phone and email with no success. There is no evidence the NRC Staff attempted to contact the Oglala Sioux Tribe's counsel, even after the Tribe's counsel had requested to be included in such communications.[202] The NRC Staff also claims that, beginning on November 23, 2016, and continuing throughout December 2016, it sent emails and made several calls to the Oglala Sioux Tribe's THPO — though, again, without communicating through the Tribe's counsel, to arrange a teleconference, but received no response.[203] After a month of virtual silence, the NRC Staff finally sent an email that included the Tribe's counsel.[204]

(ii) SLOW RESPONSE TIMES BY BOTH PARTIES

The record before us also suggests that neither the NRC Staff nor the Oglala Sioux Tribe could be considered highly responsive as the consultation process has unfolded over the past 2 years. No one party is singularly to blame; both the Oglala Sioux Tribe and the NRC Staff have been slow to meet to resolve Contentions 1A and 1B. Along with the aforementioned periods during which there was no contact for weeks or months at a time, the "regular" correspondence exchange between the parties proceeded slowly and actual meetings took an overly long time to schedule. The first communication from the NRC Staff to the Oglala Sioux Tribe was on June 23, 2015. The Oglala Sioux Tribe's response came a month later, on July 22, 2015. The NRC Staff then waited another month, until August 26, 2015, to respond to the Oglala Sioux Tribe, which in turn did not respond until September 24, 2015. The parties communicated back and forth for nearly 1 year before the May 2016 Pine Ridge meeting was finally held due to the lengthy delays between letters. Although the pace

[200] Oglala Sioux Tribe's Response at 4-5.

[201] *Id.* at 5 (quoting Email from Jeffrey C. Parsons, Counsel for the Oglala Sioux Tribe, to Kellee L. Jamerson, Project Manager, Environmental Review Branch (Dec. 1, 2015) (ADAMS Accession No. ML17209A078)).

[202] Oglala Sioux Tribe's Response at 6-7; NRC Staff's Motion Statement of Facts at 8, ¶¶ 26, 27. Not only did the NRC Staff not include counsel for the Oglala Sioux Tribe on these communications, it apparently did not include its own counsel either.

[203] NRC Staff's Motion Statement of Facts at 9, ¶ 30.

[204] *Id.* at 9, ¶ 31.

of their communication quickened somewhat between December 2015 and the May 2016 Pine Ridge meeting, it was nearly 3 months after that government-to-government consultation before the NRC Staff reached out again to the Oglala Sioux Tribe.[205] In all, between the Pine Ridge meeting and the Board-ordered teleconference, the pleadings reflect only two attempts at contact by the NRC Staff and none by the Oglala Sioux Tribe.[206] The NRC Staff also repeatedly asserts that it had to send follow-up emails or make multiple calls to prompt a response from the Oglala Sioux Tribe.[207]

(iii) MANDATORY DISCLOSURE FAILURES

Pursuant to 10 C.F.R. § 2.336(d), all parties bear an ongoing obligation to disclose any documents relevant to admitted contentions, which — following our issuance of the Partial Initial Decision — included Contentions 1A and 1B.[208] The Oglala Sioux Tribe has argued that the NRC Staff failed to comply with these requirements by withholding documents relating to communications between the NRC Staff and Powertech.[209] The Oglala Sioux Tribe asserts that, "[u]nbeknownst" to it, the survey terms that were proposed in the April 14, 2017 letter were "sent in draft form to representatives of Powertech for the company's input and edits" and that the email containing the draft "reference[d] unspecified prior discussions between NRC Staff and Powertech."[210] The Oglala Sioux Tribe maintains the "NRC Staff has in its possession but has not provided in Monthly [Disclosure] Reports, emails, letters, invoices and other documents addressing Powertech's refusal to pay for NRC Staff time spent complying with the Board and Commission Orders" as well as other documents pertaining to this adjudication.[211]

(iv) FAILURE TO MOVE FROM NEGOTIATING POSITION

Throughout the consultation process, both the NRC Staff and the Oglala Sioux Tribe have appeared unwilling and/or unable to step away from their original negotiating position and move toward compromise. The Oglala Sioux Tribe finds fault with the NRC Staff's continued open-site survey proposal containing "the precise same parameters rejected by the Tribe for years" and for failing to "provide[ ] input on the methodology set out in the Makoche Wowapi

[205] *Id.* at 6-7, ¶ 23, and 8, ¶ 25; Oglala Sioux Tribe's Response at 6.
[206] NRC Staff's Motion Statement of Facts at 8, ¶¶ 25-26; Oglala Sioux Tribe's Response at 6.
[207] *E.g.,* NRC Staff's Motion Statement of Facts at 8, ¶¶ 25-26, and 9, ¶¶ 29-31.
[208] 10 C.F.R. § 2.336(d); *see also* LBP-15-16, 81 NRC at 708.
[209] Oglala Sioux Tribe's Response at 12-13, 19-20, 30.
[210] *Id.* at 12.
[211] *Id.* at 19-20.

proposal."[212] It further complains that each invitation to participate in a survey or discuss a proposal for the survey methodology involved the NRC Staff "describing the same open-site approach limiting a survey to 2 weeks and excluding all other tribes," which the Oglala Sioux Tribe "had repeatedly informed NRC Staff . . . was not based on any recognized discipline or methodology and was therefore unacceptable."[213]

The Oglala Sioux Tribe, however, appears to have taken a similarly inflexible approach to proposing other methods of conducting the survey. Although it claimed during the Board's November 7, 2016 teleconference that it was willing to participate in "any methodology that is appropriate," to assess tribal cultural resources, it also admits that it has continually used the Makoche Wowapi approach as its "starting point," despite the fact that the NRC Staff has never been receptive to that approach.[214]

The NRC Staff and the Oglala Sioux Tribe's disinclination to consider other approaches for obtaining information about the Oglala Sioux Tribe's cultural resources is most apparent in the correspondence between the parties directly preceding the NRC Staff's recent filing for summary disposition. After the Board held the November 7, 2016 teleconference with the NRC Staff and the Oglala Sioux Tribe, wherein both agreed they would consider the other's thoughts on an appropriate methodology to assess Oglala Sioux Tribe cultural resources,[215] the NRC Staff and the Oglala Sioux Tribe held their own teleconference on January 31, 2017. The summary of that teleconference states that the NRC Staff "presented its preliminary tribal survey approach," i.e., the open-site survey.[216] The Oglala Sioux Tribe, in turn, "expressed its disappointment with this proposal and noted that it was the same proposal offered to Tribes and rejected by the Oglala Sioux Tribe during the NRC's licensing review of the Dewey-Burdock ISR Project."[217] But rather than proposing alternatives other than its originally proposed methodology, the "Oglala Sioux Tribe expressed its preference to develop a survey methodology similar in nature to the Makoche Wowapi survey proposal that was submitted to the NRC in September 2012."[218]

Yet, despite both parties' apparent continued inflexibility, the NRC Staff also "expressed interest in receiving information about the survey methodology/approach," and the Oglala Sioux Tribe "committed to provide the NRC

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[212] *E.g.,* Oglala Sioux Tribe's Response at 11.
[213] *Id.* at 12.
[214] Tr. at 44-45 (Nov. 7, 2016).
[215] *See* Tr. at 44-45, 54 (Nov. 7, 2016).
[216] January 31, 2017 Teleconference Summary at 1.
[217] *Id.*
[218] *Id.*

staff with information about a tribal survey approach."[219] However, further negotiations on an acceptable methodology by both parties never transpired. Thus, despite both parties' expressed interest in finding a mutually acceptable method for conducting the tribal cultural resource survey, on April 14, 2017, the NRC Staff sent the Oglala Sioux Tribe its final proposal that once again stated the NRC Staff would provide an opportunity to participate in the same open-site survey approach offered to the tribes in the original licensing review.[220] In its May 31, 2017 response, the Oglala Sioux Tribe showed greater flexibility by identifying specific elements the Tribe believed were necessary for an adequate survey, and did so without referencing the Makoche Wowapi approach.[221] At that point, however, the NRC Staff rejected any further negotiation regarding a cultural resources survey and instead filed its motion for summary disposition.

b. Solutions Moving Forward

Having pointed out the pitfalls of the past 2 years, the Board provides the following observations on how the parties can improve their communication with, and better meet their obligations to one another. This guidance would apply to both the resolution of Contention 1A and the parties' prospective interactions pursuant to the existing Programmatic Agreement that governs any Powertech activities onsite that may impact existing cultural resources.[222]

(i) STRENGTHENING COMMUNICATION

The Board anticipates that going forward the parties will be more timely and responsive in their communications. Effective and productive discourse demands as much. For successful negotiation and consultation and to create a strong working relationship, regular dialogue must develop through frequent exchanges. Both the NRC Staff and the Oglala Sioux Tribe and their counsel need to improve their response times as consultation continues under the Programmatic Agreement.[223] It should not take a year to schedule a meeting, and the Board should not have to order a teleconference to bring the parties together.

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[219] *Id.* at 2.

[220] *See* NRC Staff April 14, 2017 Letter.

[221] *See* Oglala Sioux Tribe May 31, 2017 Response at 3-8.

[222] Programmatic Agreement Among U.S. Nuclear Regulatory Commission, Bureau of Land Management, South Dakota State Historic Preservation Office, Powertech (USA), Inc., and Advisory Council on Historic Preservation Regarding the Dewey-Burdock In Situ Recovery Project Located in Custer and Fall River Counties South Dakota at 5-6, § 3, and 8-10, § 6 (Mar. 19, 2014) (ADAMS Accession No. ML14066A347) [hereinafter Programmatic Agreement].

[223] *See id.* at 5-6, § 3.

Likewise, failing to copy counsel created at least 4 months' worth of communication delay over the past 2 years. Although it appears that many of the missteps in communication during the past 2 years were between the Oglala Sioux Tribe's staff and the NRC Staff — and not their counsel — the parties should strive to include each other's counsel in their communications. This is particularly true when a staff member (from either the NRC Staff or the Tribe) has difficulty reaching the opposing party. Given that the parties' counsel have an ethical obligation in accord with the ABA Model Rules of Professional Conduct to make reasonable efforts to expedite litigation in a manner consistent with their party's interests,[224] including counsel in the communication process could drastically reduce the time between the parties' responses. As long as this case remains active before the Board, all communication concerning scheduling or consultation efforts should include counsel. Further, given the prior problems, counsel for the Oglala Sioux Tribe and counsel for the NRC Staff should come to an agreement regarding how future communication between the Tribal staff and NRC Staff should be conducted, and to what extent counsel needs to be involved in those communications. At minimum, when counsel for any party specifically requests that it be included as a recipient to a communication with its client, that request should be honored.

While we have held that, even with these communications missteps, the NRC Staff's consultation-related actions were minimally sufficient to meet its NHPA burden, we once again reiterate that the "NRC Staff has been much better served when . . . it has worked with Indian tribes to comply with the substance of NEPA and the NHPA."[225] This involves the NRC Staff being prompt in its responses and including the Oglala Sioux Tribe's counsel, an approach that all other parties would be well served to abide by as well.

(ii) MANDATORY DISCLOSURES

Section 2.336 of 10 C.F.R. provides for "general discovery" in Subpart L proceedings.[226] In pertinent part, the regulation requires that "all parties . . . shall . . . disclose and provide . . . all documents and data compilations in the possession, custody, or control of the party that are relevant to the contentions."[227] The regulation establishes that each party's duty to submit these mandatory disclosures is ongoing, and that each party must make these mandatory disclosures once a

[224] Model Rules of Prof'l Conduct r. 3.2 (Am. Bar. Ass'n 1983).

[225] *Crow Butte,* LBP-16-7, 83 NRC at 371.

[226] Although 10 C.F.R. § 2.336 is contained in Subpart C to the agency's Part 2 rules of procedure, Subpart C is generally applicable to all adjudications pursuant to the Atomic Energy Act, including Subpart L proceedings. 10 C.F.R. §§ 2.300, 2.1200.

[227] *Id.* § 2.336(a)(2)(i).

month and without the filing of a discovery request by other parties.[228] Furthermore, the Commission has made clear that the scope of mandatory disclosures is "wide-reaching."[229] Because the mandatory disclosures are the only form of discovery in Subpart L proceedings, they, "like all discovery exchanges, cover a vast array of information and documents that are not evidence and need not meet the requirements of admissible evidence."[230]

Given the broad scope of the mandatory disclosure obligation, absent some claim of privilege, all parties bore the continuing obligation following the issuance of the Partial Initial Decision to disclose any documents in their possession that were potentially relevant to (1) consultation between the NRC Staff and the Oglala Sioux Tribe, and (2) the NRC Staff's efforts in addressing the identified deficiencies in the FSEIS. This includes the disclosure of any correspondence between the NRC Staff and Powertech concerning the methodology for assessing impacts to Native American cultural resources.[231] Although our ruling on its dispositive motion for summary disposition means that the NRC Staff no longer has a continuing obligation to disclose documents relevant to Contention 1B,[232] documents relevant to the NRC Staff's consideration of methodologies for addressing the FSEIS deficiencies — such as correspondence between itself and Powertech on the preferred methodology for assessing tribal cultural resources — are relevant to Contention 1A, and thus the NRC Staff's and Powertech's obligation to disclose these documents is ongoing.

Furthermore, in its September 28, 2017 update to the Board, the NRC Staff seemed to recognize it erred with respect to this mandatory obligation.[233] That update identified several items of correspondence between the NRC Staff and Powertech that occurred between July 2016 and May 2017, which were "inadvertently not included in the Staff's previous monthly disclosures."[234] All of the parties need to re-review their records and ensure that they have disclosed any and all existing documents that have not been previously disclosed that are potentially relevant to Contention 1A. Going forward, with Contention 1A still pending, the parties must continue to disclose any documents relevant to the

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[228] *Id.* § 2.336(a), (d).

[229] *Crow Butte Resources, Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 572 (2009).

[230] *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-30, 70 NRC 1039, 1046 (2009) (citing 10 C.F.R. § 2.705(b)(1)).

[231] Although the Oglala Sioux Tribe specifically allege that the NRC Staff violated its duty to disclose this correspondence, Powertech is equally obliged to disclose such correspondence to the other parties.

[232] *See* 10 C.F.R. § 2.336(d).

[233] NRC Staff, Supplementary Hearing File and Mandatory Disclosures (Sept. 28, 2017).

[234] *Id.* at 1-2.

NRC Staff's efforts to resolve the deficiencies identified in this decision, in general, and any documents pertaining to the selection of a preferred methodology for Native American cultural resources, in particular.[235]

(iii) NEGOTIATING POSITION

Both parties appeared to be reluctant to be the first to make a concession and offer a proposal that varied in any substantial degree from its original bargaining position. The NRC Staff has only offered an open-site proposal that the Oglala Sioux Tribe deems wholly objectionable. The Oglala Sioux Tribe has not put forward a proposal which varies from the Makoche Wowapi proposal that the NRC Staff has rejected. This has produced a hopeless impasse.

Nonetheless, we recognize that ultimately it is the obligation of the NRC Staff — not the Oglala Sioux Tribe — to select a methodology that will satisfy NEPA. As such, while the NRC Staff may continue to work with the Oglala Sioux Tribe in identifying a reasonable, affordable method to obtain information on the Oglala Sioux Tribe's cultural resources, the NRC Staff is not obligated to adopt any specific methodology. Moving forward, the NRC Staff's primary responsibility is to carefully consider what options may result in actually obtaining pertinent information on the Sioux Tribes' cultural resources, with or without the Oglala Sioux Tribe's input, and make a choice about which option to implement. If the NRC Staff chooses to continue to consult with the Oglala Sioux Tribe in identifying an acceptable approach to obtaining information on tribal cultural resources, both parties should come forward with constructive suggestions and comments, rather than simply dismissing the other's proposed approach. Even if the NRC Staff selects a methodology without further input from the Oglala Sioux Tribe, we do note that the Oglala Sioux Tribe will have additional meaningful opportunities to consult during future phases of the project pursuant to the Programmatic Agreement.[236]

c. Scheduling

While, as we have previously recognized, it is inappropriate for the Board to direct the NRC Staff in the completion of its NEPA review activities, it is also clear that the Board is given the responsibility to manage the schedule for this adjudicatory proceeding.[237] In this instance, the parties have had some 2 years to address the deficiencies in the NRC Staff's NEPA cultural resources analysis for the Dewey-Burdock project site as identified in Contention 1A and

[235] *See* 10 C.F.R. § 2.336(b)(1)-(5).
[236] Programmatic Agreement at 5-6, § 3, and 8-10, § 6.
[237] *See* 10 C.F.R. §§ 2.319(k), 2.332.

the Board's Partial Initial Decision. Under the circumstances, given the rulings and guidance now provided by the Board in this decision, it seems reasonable to the Board that over the next 6 months the parties have the following options: (1) in the near term, they may submit a joint motion to request the appointment of a Settlement Judge to conduct settlement negotiations to assist in the resolution of this dispute pursuant to 10 C.F.R. § 2.338, and pursue that avenue in an attempt to reach a settlement and dismissal of the contention; (2) they may continue to confer with one another in an attempt to find a method of addressing the deficiencies in the FSEIS that is mutually agreeable to both parties, and, if successful, file a joint motion for dismissal of the contention; (3) the NRC Staff may, without consultation with the Oglala Sioux Tribe, consider and select a method[238] for addressing the FSEIS deficiencies, and file a new motion for summary disposition; or (4) if options one through three do not result in a resolution, prepare for and participate in an evidentiary hearing to resolve Contention 1A on the reasonableness of the terms of the NRC Staff's proposed open-site survey.

With regard to all of these prospects save for the first, we set out the following schedule for the parties' motion for summary disposition filings and the evidentiary hearing, and which is summarized in Appendix A.

(i) SUMMARY DISPOSITION

If any party wishes to submit any motion for summary disposition to resolve Contention 1A, that filing is due no later than April 20, 2018. In accordance with 10 C.F.R. § 2.1205(b), any response supporting or opposing the motion must be filed on or before May 10, 2018, and any reply to a response in support of the motion is due on or before Monday, May 21, 2018.

Consistent with this schedule, the Board anticipates issuing a decision on the motions on or about June 1, 2018.

(ii) EVIDENTIARY HEARING

Assuming we do not resolve Contention 1A on any party's motion for summary disposition or do not receive any summary disposition motion by April 20, 2018, we will hold an evidentiary hearing to commence on June 26, 2018, and to conclude on June 28, 2018. Parties are to file position statements and prefiled direct testimony no later than June 11, 2018, and rebuttals to the position statements and prefiled direct testimony are to be filed no later than June 18, 2018.

[238] This may be a method entirely different from the currently proposed open-site survey or a version of the open-site survey that the NRC Staff can argue — with adequate legal and factual support — is not subject to the dispute of material fact on the method's reasonableness that has been identified in this decision.

Any proposed cross-examination questions for the evidentiary hearing shall be submitted to the Board no later than June 22, 2018. Following the conclusion of the evidentiary hearing, parties are to submit their proposed findings of fact and conclusions of law no later than July 30, 2018, and replies to the findings of fact and conclusions of law shall be filed no later than August 29, 2018.

Consistent with this schedule, the Board anticipates issuing an initial decision finally resolving Contention 1A on or about October 12, 2018.

(iii) CONTINUING BOARD OVERSIGHT OF THIS PROCEEDING

Finally, to monitor the parties' progress relative to the schedule above, in addition to continuing to receive monthly reports, we anticipate holding more frequent teleconferences with the parties about their progress in their efforts to resolve Contention 1A. To this end, the parties are advised that the Board anticipates holding a telephone prehearing conference with the parties during the week of November 13, 2017, and will be contacting the parties in the near term regarding the details.

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Dr. Mark O. Barnett
ADMINISTRATIVE JUDGE

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Rockville, Maryland
October 19, 2017

Additional Views of Bollwerk, A.J.

While I agree fully with the Licensing Board's resolution of the NRC Staff's dispositive motions as to both Contentions 1A and 1B, in light of the history of this case since the Licensing Board's April 15, 2015 partial initial decision (PID), I write separately regarding the future course of this proceeding.

Delay in an adjudication generally favors one of the litigants. In this instance, given circumstances such as the diminished price of uranium; declining agency budgets; the prospect that something pertinent might come from a Commission decision on not dissimilar issues in the pending *Crow Butte* license renewal case appeal, *see Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-16-7, 83 NRC 340, 366-83, 394-404 (2016), *appeals pending*; and the pending federal court litigation on whether the effectiveness of the Powertech license should be rescinded in light of the Board's April 2015 PID, *see* Oglala Sioux Tribe's Response in Opposition to NRC Staff Motion for Summary Disposition of Contentions 1A and 1B (Sept. 1, 2017) at 15, the 2-year-plus interval since the Board's April 2015 PID may have had value for all of the litigants in this proceeding.

Nonetheless, as the final portion of the Board's order indicates, this litigation cannot continue at its previous pace. All of the litigants are entitled to, and must participate in, an effort to reach a fair and efficient conclusion to this proceeding. Thus, with the schedule incorporated into the Board's decision denying the NRC Staff's dispositive motion regarding Contention 1A, the question of what constitutes an appropriate methodology for identifying Sioux tribal cultural resources on the Dewey-Burdock project site is now on a course to be resolved before the Board in 2018.

In setting this schedule, the Board initially has provided the parties with 6 months to reach an accommodation regarding how an NRC Staff-administered cultural resources study/survey for the Dewey-Burdock project site should be fashioned. As the Board's summary disposition ruling indicates, this may involve further efforts by the NRC Staff to consider Oglala Sioux Tribe proposed options to create an appropriate study/survey, with suitable assistance from Powertech and pertinent tribal participants.

And while the NRC Staff ultimately is responsible for shaping the cultural resources survey/study, important components in such an effort may well include (1) in accord with the testimony of the NRC Staff's witnesses Goodman and Nickens in the *Crow Butte* license renewal case, *see supra* p. 199, obtaining pertinent ethnographic data, presumably from tribal elders or other knowledgeable sources, regarding the identification of culturally sensitive spaces that might exist on the Dewey-Burdock project site; and (2) identifying and employing methods that allow such ethnographic material to be utilized in an efficient, cost-effective manner to pinpoint any particular areas on the facility site that may have cultural

resource sensitivity. Addressing these items in a mutually satisfactory manner undoubtedly will require significant party cooperation and accommodation, as well as a willingness to provide the essential resources for execution, whether financial, informational, or otherwise. Thus, for example, if tribal elders are to be the ethnographic information source, a mutually agreeable arrangement seemingly would need to be generated to make the pertinent individuals available timely and to provide logistical support so that the information they afford can be effectively employed. By the same token, to translate such ethnographic information into actual geographic locations on the expansive Dewey-Burdock project site may merit consideration about whether, for instance, the use of initial surveys incorporating light detection and ranging (LiDAR) and/or drone technology would aid in making traditional "boots on the ground" pedestrian surveys more efficient. Hopefully, these possibilities and others will be considered as the NRC Staff seeks to craft an archaeologically and anthropologically sound cultural resources survey/study for the Dewey-Burdock project site.

No doubt, the parties will be considering (as they should be) the costs involved in whatever options are scrutinized. But with the litigation schedule now established by the Board, such calculations also should encompass the expenses involved for each in preparing for, participating in, and submitting post-hearing filings associated with an evidentiary hearing on Contention 1A, expenditures that may come into play in relatively short order if they are unable to reach a resolution of this contention among themselves.

APPENDIX A
SCHEDULE — *Powertech USA, Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility) Proceeding

Event:	**Date:**
Licensing Board Order Denying Staff Dispositive Motion on Contention 1A	Oct. 19, 2017
Dispositive Motion(s) Schedule	
Additional Dispositive Motion(s) on Contention 1A Due	Apr. 20, 2018
Responses Supporting or Opposing Summary Disposition Motion(s) Due	May 10, 2018
Reply to Responses Supporting Summary Disposition Motion(s) Due	May 21, 2018
Licensing Board Ruling on Summary Disposition Motion(s)	June 1, 2018
Evidentiary Hearing Schedule	
Positions Statements/Prefiled Direct Testimony Due	June 11, 2018
Rebuttal Statements/Prefiled Rebuttal Testimony Due	June 18, 2018
Proposed Cross-Examination Questions Due	June 22, 2018
Evidentiary Hearing	June 26-28, 2018
Proposed Findings of Fact/Conclusions of Law Due	July 30, 2018
Reply Findings of Fact/Conclusions of Law Due	Aug. 29, 2018
Licensing Board Initial Decision	Oct. 12, 2018

Cite as 88 NRC 95 (2018) **LBP-18-5**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Mark O. Barnett
G. Paul Bollwerk, III

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH USA, INC.
(Dewey-Burdock In Situ Uranium Recovery Facility) **October 30, 2018**

This order addresses two motions for summary disposition in an ongoing proceeding involving the Source Materials License issued to Powertech (USA), Inc. (Powertech). The Board denies the NRC Staff's motion for summary disposition of Contention 1A and reaffirms its conclusion that the NRC Staff has not satisfied its National Environmental Policy Act (NEPA) responsibility, finding that material issues of fact exist. The Board also finds that the Oglala Sioux Tribe has failed to show that there is no material factual dispute as to the reasonableness of the NRC Staff's survey methodology or the NRC Staff's overall implementation of an approach to address NEPA responsibilities. The Board directs that unless the NRC Staff indicates it wants to resume its attempt to implement the NRC Staff's March 2018 Approach, the parties must proceed to an evidentiary hearing.

RULES OF PRACTICE: SUMMARY DISPOSITION; STANDARDS

The standards governing summary disposition in Subpart L proceedings are set out in 10 C.F.R. § 2.1205, and "are based upon those the federal courts apply

to motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010).

RULES OF PRACTICE: SUMMARY DISPOSITION; STANDARDS

Summary disposition may be granted:

> if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.

10 C.F.R. § 2.710(d)(2). This standard establishes a two-part test: First, a board must determine if any material facts remain genuinely in dispute; second, if no disputes remain, the board must determine if the movant's legal position is correct. *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-31, 74 NRC 643, 648 (2011).

RULES OF PRACTICE: SUMMARY DISPOSITION; STANDARDS

For a simplified hearing governed by Subpart L of the regulations, 10 C.F.R. § 2.1205(c) states that "[i]n ruling on motions for summary disposition, the presiding officer shall apply the standards for summary disposition set forth in subpart G of this part." *Id.* § 2.1205(c).

RULES OF PRACTICE: SUMMARY DISPOSITION; BURDEN OF PROOF

The moving party carries the burden of demonstrating that summary disposition is appropriate and must explain in writing the basis for the motion. *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993). To support its motion, the moving party must also "attach . . . a short and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard." 10 C.F.R. § 2.710(a). "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 255 (1986).

RULES OF PRACTICE: SUMMARY DISPOSITION

Summary disposition should not be granted if it would require the board

to engage in the making of "[c]redibility determinations, the weighing of the evidence, [or] the drawing of legitimate inferences from the facts." *Anderson,* 477 U.S. at 255. Doing so would require the board to "conduct a trial on the written record by weighing the evidence and endeavoring to determine the truth of the matter." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-16-3, 83 NRC 169, 176 (2016). Instead, the board's only role in deciding whether to grant a motion for summary disposition is to determine whether any genuine issue of material fact exists. *Anderson,* 477 U.S. at 249.

NEPA: PURPOSE OF INQUIRY

Congress enacted NEPA to protect and promote environmental quality, as well as to "preserve important historic, cultural, and natural aspects of our national heritage." 42 U.S.C. § 4331. These goals are "realized through a set of 'action-forcing' procedures that require that agencies take a 'hard look' at environmental consequences," and disseminate that information to the public. *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 350 (1989) (quoting *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21 (1976)).

NEPA: EIS; ADVERSE EFFECTS

Any proposed agency action "significantly affecting the quality of the human environment" requires a detailed environmental impact statement (EIS). 42 U.S.C. § 4332(C) (2012). Adverse effects that must be evaluated include "ecological . . . , aesthetic, historic, cultural, economic, social, or health" effects. 40 C.F.R. § 1508.8. The Supreme Court has recognized that "one important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences." *Robertson,* 490 U.S. at 351. Such a discussion is important to show that the agency has taken a "hard look." *Id.* at 352.

NEPA: EIS; MITIGATION

NEPA's implementing regulations require the agency to discuss possible mitigation measures in defining the scope of the EIS, in discussing alternatives to the proposed action, and consequences of that action, and in explaining its ultimate decision. 40 C.F.R. §§ 1508.25(b), 1502.14(f), 1502.16(h), 1502.2(c). The Commission's regulations require the NRC Staff to include in an EIS "an analysis of significant problems and objections raised by . . . any affected Indian tribes and by other interested persons." 10 C.F.R. § 51.71(b).

NEPA: RULE OF REASON

NEPA does not "mandate particular results," *Robertson,* 490 U.S. at 350, or require agencies to analyze every conceivable aspect of a proposed project. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002). Those risks that are "remote and speculative" or events that have a low probability of occurring are unnecessary to evaluate. *Limerick Ecology Action, Inc. v. NRC,* 869 F.2d 719, 745 (3d Cir. 1989). Rather, NEPA analysis must take into account "reasonably foreseeable" results. *Private Fuel Storage,* CLI-02-25, 56 NRC at 348.

NEPA: RULE OF REASON; METHODOLOGY

In assessing impacts, agencies are free to "select their own methodology so long as that methodology is reasonable." *Pilgrim,* CLI-10-11, 71 NRC at 316 (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)).

NEPA: INCOMPLETE INFORMATION

Through 40 C.F.R. § 1502.22, the Council on Environmental Quality (CEQ) has provided a legal mechanism for instances when an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment. When the required information "is incomplete or unavailable . . . the agency shall always make clear that such information is lacking." 40 C.F.R. § 1502.22. Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the EIS. *Id.* § 1502.22(a).

NEPA: EXORBITANT COSTS FOR OBTAINING INFORMATION

If, on the other hand, the costs of obtaining the information are exorbitant, the agency must include in the EIS:

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

Id. § 1502.22(b). This standard provides a route for an agency to satisfy its NEPA obligation by disclosing and explaining its lack of information and providing a discussion of the potential impact to the best of its ability without the relevant information.

COUNCIL ON ENVIRONMENTAL QUALITY REGULATIONS: IMPACT ON AGENCY

Council on Environmental Quality (CEQ) regulations are not binding on the NRC when they "have a substantive impact on the way in which the Commission performs its regulatory functions." *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 444 & nn.94-95 (2011) (quoting Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9352 (Mar. 12, 1984)). The Commission has made clear that it accepts the procedural requirements included in 40 C.F.R. § 1502.22. Final Rule on Environmental Protection Regulations, 49 Fed. Reg. at 9356.

NEPA: ENVIRONMENTAL ANALYSIS; INCOMPLETE INFORMATION

As part of its NEPA responsibilities, a federal agency must undertake reasonable efforts to acquire missing information. *See* 40 C.F.R. § 1502.22; *Winthrop,* 535 F.3d at 13; *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-22, 72 NRC 202, 208 (2010).

LICENSING BOARD(S): AUTHORITY TO ESTABLISH PROCEDURES

The Board cannot direct the NRC Staff to pursue a single avenue to meet its statutory NEPA obligations. The Board can, however, establish procedures to ensure the NEPA-required "hard look" is taken or a legally sufficient explanation is placed on the record as to why the required information is missing and not "reasonably obtainable."

MEMORANDUM AND ORDER

(Denying Motions for Summary Disposition as to Contention 1A)

On August 17, 2018, the Nuclear Regulatory Commission Staff (NRC Staff) and Intervenor Oglala Sioux Tribe (Oglala Sioux Tribe or Tribe) filed separate motions for summary disposition of Contention 1A, the sole remaining con-

tention in this proceeding.[1] Previously, the Board found in favor of the Oglala Sioux Tribe and the Consolidated Intervenors on Contention 1A in its 2015 Partial Initial Decision, holding that the NRC Staff's obligation to assess the impacts to Native American cultural, religious, and historical resources under the National Environmental Policy Act (NEPA) had not been satisfied.[2] Thereafter, in October 2017, the Board denied the NRC Staff's previous motion for summary disposition and reaffirmed its conclusion that the NRC Staff had not yet satisfied its NEPA duty.[3] The Board found that "the NRC Staff ha[d] failed to establish that there [we]re no material facts in dispute relative to the NRC Staff's NEPA burden to adequately address the impact of the Dewey-Burdock project on tribal cultural resources," particularly with regard to "the reasonableness of its method for assessing impacts from the Dewey-Burdock project on Sioux tribal cultural resources."[4]

Now, one year later, in this Memorandum and Order the Board again finds that the NRC Staff has failed to show that there is no material factual dispute as to whether the NRC Staff has met its NEPA burden and fulfilled its duty to adequately address impacts to Sioux tribal cultural resources at the Dewey-Burdock project site. We therefore deny the NRC Staff's current motion for summary disposition as to Contention 1A. While the NRC Staff's proposal for resolving the environmental matters at issue here (the March 2018 Approach),[5] was agreed to by all parties and could constitute a valid path for resolving Contention 1A, material factual disputes still remain regarding the reasonableness of the NRC Staff's implementation of this approach, relating to (1) the survey methodology, and (2) the NRC Staff's unilateral decision to discontinue efforts to implement the March 2018 Approach during the first week of Phase One of the site survey.

We likewise deny the Oglala Sioux Tribe's motion for summary disposition and its request to stay or revoke the license of Powertech (USA), Inc. (Powertech). The Oglala Sioux Tribe has failed to show that there is no issue of material fact as to the reasonableness of the NRC Staff's survey methodology or the NRC Staff's overall implementation of the March 2018 Approach.

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[1] NRC Staff's Motion for Summary Disposition of Contention 1A (Aug. 17, 2018) [hereinafter NRC Staff Motion]; Oglala Sioux Tribe's Motion for Summary Disposition (Aug. 17, 2018) [hereinafter OST Motion].

[2] LBP-15-16, 81 NRC 618, 653 (2015), *aff'd,* CLI-16-20, 84 NRC 219 (2016).

[3] LBP-17-9, 86 NRC 167, 173-74 (2016), *pet. for review denied,* CLI-18-7, 88 NRC 1, 2 (2018).

[4] *Id.*

[5] *See infra* Section II.

I. BACKGROUND ASSOCIATED WITH THE NRC STAFF'S MARCH 2018 APPROACH

A. Procedural History Preceding the 2015 Partial Initial Decision

This proceeding[6] began more than nine years ago when Powertech submitted a license application to construct and operate the proposed Dewey-Burdock in situ uranium recovery (ISR) facility in Custer and Fall River Counties, South Dakota.[7] Thereafter, Consolidated Intervenors (two individuals and six organizations) filed a Request for Hearing and Petition for Leave to Intervene on March 8, 2010,[8] and the Oglala Sioux Tribe filed a separate Request for Hearing and Petition for Leave to Intervene on April 6, 2010.[9] The Board held oral argument on the petitions on June 8 and 9, 2010,[10] and on August 5, 2010, the Board admitted the Oglala Sioux Tribe and Consolidated Intervenors as intervenors to the proceeding.[11] The Board admitted four of the Oglala Sioux Tribe's contentions[12] and three of the Consolidated Intervenors' contentions.[13]

After the Draft Supplemental Environmental Impact Statement (DSEIS) was issued on November 26, 2012, the Oglala Sioux Tribe and Consolidated Intervenors filed new and amended contentions.[14] In a July 22, 2013 decision, the Board admitted nine contentions based on the new and original contentions.[15]

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[6] A detailed procedural history of this proceeding can be found in the Board's April 30, 2015 Partial Initial Decision. LBP-15-16, 81 NRC at 626-35.

[7] Dewey-Burdock Project Supplement to Application for NRC Uranium Recovery License Dated February 2009 (Aug. 2009) (ADAMS Accession No. ML092870155).

[8] Consolidated Request for Hearing and Petition for Leave to Intervene (Mar. 8, 2010).

[9] Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (Apr. 6, 2010) at 22-23 [hereinafter Oglala Sioux Tribe Petition].

[10] Tr. at 1-405 (June 8-9, 2010). Throughout this proceeding, beginning with oral argument in 2010, the transcripts have continued with sequential numbering. However, the transcript from November 7, 2016, was numbered with pages 1-61, and the transcript from November 16, 2017, began the transcript page numbering again from page 1171, which had been the starting number for the transcript from August 21, 2014. To avoid any confusion, we provide the date of the transcript with each citation.

[11] LBP-10-16, 72 NRC 361, 376 (2010).

[12] *Id.* at 444.

[13] *Id.* at 443.

[14] *See* List of Contentions of the Oglala Sioux Tribe Based on the Draft Supplemental Environmental Impact Statement (Jan. 25, 2013); Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013).

[15] LBP-13-9, 78 NRC 37, 112-13 (2013). The seven original contentions contesting the adequacy of various aspects of Powertech's Environmental Report were migrated to challenges of the applicable portions of the DSEIS. *Id.* at 50. Several of the original seven contentions were reformulated by the Board for a total of five admitted contentions, and of the three new contentions that were admitted, one was split into two contentions for a total of four new contentions. *Id.* at 112-13.

When the NRC Staff issued its Final Supplemental Environmental Impact Statement (FSEIS) on January 29, 2014, the previously admitted contentions migrated as challenges to the FSEIS.[16] Subsequently, two of the admitted contentions were voluntarily withdrawn by the Oglala Sioux Tribe.[17]

On April 8, 2014, before a hearing was held on the admitted contentions, pursuant to 10 C.F.R. § 2.1202(a), the NRC Staff issued a 10 C.F.R. Part 40 source materials license to Powertech, authorizing Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock project.[18] On April 11, 2014, both the NRC Staff and the Oglala Sioux Tribe filed their first motions for summary disposition in this proceeding.[19] The Board denied both parties' motions on June 2, 2014.[20] The Board then held an evidentiary hearing in Rapid City, South Dakota, from August 19-21, 2014, on the seven admitted contentions.[21] On April 30, 2015, the Board issued a Partial Initial Decision on the merits of those contentions.[22]

B. The 2015 Partial Initial Decision and the Commission's Review

The Board's April 30, 2015 Partial Initial Decision resolved all contentions in favor of the NRC Staff and Powertech except for Contentions 1A and 1B, on which the Oglala Sioux Tribe and Consolidated Intervenors prevailed.[23] Contention 1A pertained to the NRC Staff's NEPA obligation to assess the impacts to Native American cultural, religious, and historical resources.[24] The Board found that the NRC Staff failed to fulfill this NEPA obligation because the FSEIS did "not contain an analysis of the impacts of the project on the cultural, historical, and religious sites of the Oglala Sioux Tribe and the majority of the

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[16] LBP-15-16, 81 NRC at 631-32.

[17] *Id.* at 633. Contentions 14A and 14B were withdrawn. *Id.*

[18] *Id.* at 632. On April 30, 2014, the Board granted a temporary stay of the license in response to motions to stay from both Intervenors. *Id.* However, after oral argument on those motions, the Board lifted the temporary stay and denied the motions on May 20, 2014. *Id.*

[19] NRC Staff's Motion for Summary Disposition on Safety Contentions 2 and 3 (Apr. 11, 2014) (seeking summary disposition on the safety aspects of Contentions 2 and 3); Oglala Sioux Tribe's Motion for Summary Disposition National Environmental Policy Act Contentions 1A and 6 — Mitigation Measures (Apr. 11, 2014) (seeking summary disposition of NEPA issues in Contentions 1A and 6).

[20] Licensing Board Order (Denying Motions for Summary Disposition) (June 2, 2014) at 7 (unpublished).

[21] LBP-15-16, 81 NRC at 633.

[22] *Id.* at 708-11.

[23] *Id.* at 708-10.

[24] *Id.* at 653.

other consulting Native American tribes."[25] Accordingly, the Board concluded that "[w]ithout additional analysis as to how the Powertech project may affect the Sioux Tribes' cultural, historical, and religious connections with the area, NEPA's hard look requirement ha[d] not been satisfied, and potentially necessary mitigation measures ha[d] not been established."[26]

Contention 1B involved the NRC Staff's National Historic Preservation Act (NHPA) obligation for government-to-government consultation with the Oglala Sioux Tribe.[27] Despite repeated concerns raised over five years by the Oglala Sioux Tribe about the consultation process, the NRC Staff held only large group meetings with members of multiple tribes, rather than a government-to-government session solely with members of the Oglala Sioux Tribe.[28] Further, while the NRC Staff sent many letters directly to the Oglala Sioux Tribe, the Board noted that "quantity does not necessarily equate with meaningful or reasonable consultation."[29] The Board found that the "NRC Staff [wa]s at least partly at fault for the failed consultation process," but also acknowledged that the Oglala Sioux Tribe shared "some responsibility for the inadequacy of the FSEIS and the lack of meaningful consultation" because "some of its demands to engage with the NRC Staff were patently unreasonable."[30] The Board concluded that in order to satisfy this NHPA consultation requirement, the NRC Staff was obligated to undertake additional consultation with the Oglala Sioux Tribe, which is the tribe with "the most direct historical, cultural, and religious ties to the area."[31]

The Board retained jurisdiction over this proceeding pending further consultation between the Oglala Sioux Tribe and the NRC Staff.[32] In the interim, however, all four parties to the proceeding filed petitions for review of the Partial Initial Decision.[33] On December 23, 2016, the Commission found no error with the Board decision that the NRC Staff's NEPA and NHPA efforts were inadequate, and affirmed the Board's decision on Contentions 1A and 1B.[34] The Commission acknowledged the proceeding remained within the Board's

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[25] *Id.* at 655.

[26] *Id.*

[27] *Id.*

[28] *Id.* at 656.

[29] *Id.*

[30] *Id.* at 656-57. Specifically, the Board found that the cost of the Oglala Sioux Tribe's Makoche Wowapi survey proposal, estimated at close to $1 million, Tr. at 807 (Aug. 19, 2014), was unreasonable. LBP-15-16, 81 NRC at 657 n.229.

[31] *Id.* at 656.

[32] *Id.* at 658. This included monthly status reports submitted by the NRC Staff describing its updated consultation efforts with the Oglala Sioux Tribe. *Id.*

[33] *See* CLI-16-20, 84 NRC at 224-27.

[34] *Id.* at 262.

jurisdiction to resolve the deficiencies identified in the Partial Initial Decision.[35] Addressing Contention 1A, the Commission concluded that the Board did not commit "clear error" in its factual determination that the NRC Staff's consideration of the Oglala Sioux Tribe's and other Native Americans' cultural resources failed to satisfy NEPA's hard look standard.[36] In addressing Contention 1B, the Commission determined that "[t]he Board, after a merits hearing, reasonably concluded that the Staff's consultation with the Tribe was insufficient to meet these requirements."[37] Finally, the Commission found that the Board had not improperly retained jurisdiction and, in carrying out the Board's order, the NRC Staff was "free to select whatever course of action it deems appropriate to address the deficiencies . . . including, but not limited to further government-to-government consultation."[38]

C. The D.C. Circuit's Review of 2015 Partial Initial Decision

After the Commission affirmed the Board's April 2015 Partial Initial Decision, the Oglala Sioux Tribe appealed the Commission's decision to the United States Court of Appeals for the District of Columbia Circuit.[39] The Oglala Sioux Tribe challenged the decision to "leave the license in effect pending the Staff's effort to cure the NEPA deficiencies," as well as the merits of several of the unfavorable Commission/Board rulings on its contentions.[40] The District of Columbia Circuit declined to rule on the merits of its contention-based challenges, finding that the Commission's order "as a whole is not final," and therefore the court did not have jurisdiction to review those rulings.[41] The court did, however, take review of the Commission's holding in CLI-16-20 that allowed the Powertech license to remain in effect while the proceeding and the NRC Staff's efforts to cure the NEPA-related deficiencies continued before the Board.[42] Although the court found that the standard the Commission applied to allow the Powertech license to become effective was contrary to NEPA, the court did not vacate the Agency's ruling. Instead, the court remanded the question of whether to allow the Powertech license to remain effective to the Commission.[43] On August 30, 2018, the Commission issued an order inviting the parties to this proceeding

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[35] *Id.*
[36] *Id.* at 247-48.
[37] *Id.* at 249.
[38] *Id.* at 251.
[39] *Oglala Sioux Tribe v. NRC,* 896 F.3d 520 (D.C. Cir. 2018).
[40] *Id.* at 526.
[41] *Id.* at 527.
[42] *Id.* at 527-37.
[43] *Id.* at 538.

to provide their views on how the Agency should respond to the Court of Appeals' ruling and what legal standard the NRC should use in evaluating whether to vacate Powertech's license.[44]

D. The 2017 Summary Disposition Decision and Commission's Review

While the Board's Partial Initial Decision was on appeal to the Commission, the NRC Staff reinitiated its government-to-government consultation efforts with the Oglala Sioux Tribe.[45] In June of 2015, letters were exchanged between the NRC Staff and the Oglala Sioux Tribe,[46] although nearly a year passed before a face-to-face consultation meeting actually took place. At that meeting, on May 19, 2016, in Pine Ridge, South Dakota, the Oglala Sioux Tribe voiced its objections to and concerns about the 2013 survey on the grounds that it "was incomplete and the survey methodology lacked scientific integrity."[47]

Noting that another eighteen months had passed with essentially no substantive progress toward agreement upon a method to collect the missing cultural, religious, and historical data, the Board convened a teleconference among the parties on November 7, 2016.[48] As a result of the teleconference, the Oglala Sioux Tribe and the NRC Staff then participated in another consultative conference call on January 31, 2017, during which the NRC Staff again proposed an open-site survey, and the Oglala Sioux Tribe again objected.[49] During the con-

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[44] Commission Order (Aug. 30, 2018) (unpublished).

[45] A more detailed history of the NRC Staff's efforts can be found in the Board's October 2017 summary disposition ruling. *See generally* LBP-17-9, 86 NRC at 174-83.

[46] Letter from Marissa G. Bailey, Director, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to John Yellow Bird Steele, President, Oglala Sioux Tribe (June 23, 2015) (ADAMS Accession No. ML15175A411); Letter from Denis Yellow Thunder, Tribal Historic Preservation Officer (THPO), Oglala Sioux Tribe, to Marissa G. Bailey, Director, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (July 22, 2015) (ADAMS Accession No. ML15203A108).

[47] Summary of Meeting with the Oglala Sioux Tribe Regarding Dewey-Burdock In Situ Uranium Recovery Project (May 19, 2016) at 2 (ADAMS Accession No. ML16182A069) [hereinafter Pine Ridge Meeting Summary]. The 2013 survey methodology was an open-site survey, which allowed each tribe to send representatives to examine any area of the Dewey-Burdock site during a one-month period, and included per diem payments for three tribal representatives from each tribe, mileage reimbursement, and an unconditional grant from Powertech to each tribe of $10,000. Letter from Kevin Hsueh, Chief, Environmental Review Branch, Division of Waste Management and Environmental Protection, to Tribal Historic Preservation Officer (THPO), Oglala Sioux Tribe at 1-2 (Feb. 8, 2013) (ADAMS Accession No. ML13039A336).

[48] LBP-17-9, 86 NRC at 180 (citing Licensing Board Memorandum and Order (Requesting Scheduling Information for Telephone Conference Call) (Oct. 13, 2016) (unpublished); NRC Staff's Consultation Status Update (June 1, 2016)).

[49] Summary of Teleconference with the Oglala Sioux Tribe Regarding the Dewey-Burdock In Situ Uranium Recovery Project (Jan. 31, 2017) (ADAMS Accession No. ML17060A260).

ference call, the Oglala Sioux Tribe reminded the NRC Staff of its preference for a more comprehensive approach, similar to the Makoche Wowapi approach proposed by the Oglala Sioux Tribe in 2012.[50] Following further email exchanges, in an April 14, 2017 letter to the Oglala Sioux Tribe's Tribal Historic Preservation Officer (THPO), the NRC Staff once again offered a two-week open-site survey proposal and requested the Oglala Sioux Tribe to either accept or reject the offer.[51] The Oglala Sioux Tribe's reply letter, dated May 31, 2017,[52] contained "significant discussion as to the types of methodologies that the Tribe expected would be included" in a cultural resources survey.[53] Specifically, the Oglala Sioux Tribe expressed a desire for the NRC Staff to engage a qualified contractor, involve other Sioux Tribes, involve tribal elders, and allow for multiple site trips.[54] Following the Oglala Sioux Tribe's May 31 letter, the NRC Staff terminated its consultation efforts, concluding that after more than two years, "further consultation [was] unlikely to result in a mutually acceptable settlement of the dispute," and that the NRC Staff had satisfied its consultation responsibilities.[55]

On August 3, 2017, the NRC Staff moved for summary disposition of Contentions 1A and 1B.[56] On October 19, 2017, the Board granted summary disposition of Contention 1B, finding that the NRC Staff's attempts at consultation had satisfied its NHPA requirements.[57] Nonetheless, concluding that material factual disputes remained, the Board denied summary disposition of Contention 1A, noting that because the NRC Staff had performed no additional survey, the deficiencies in the FSEIS remained.[58]

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[50] *Id.* at 1. On September 27, 2012, the consulting tribes presented a cultural resources survey prepared by Makoche Wowapi/Mentz-Wilson Consultants to the NRC Staff as a means to identify resources in the area. LBP-15-16, 81 NRC at 646. The Makoche Wowapi proposal was estimated to cost approximately $818,000. Makoche Wowapi/Mentz-Wilson Consultants, Proposal with Cost Estimate for Traditional Cultural Properties Survey for Proposed Dewey Burdock Project (Sept. 27, 2012) at 1 (ADAMS Accession No. ML15244B360).

[51] Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, THPO, Oglala Sioux Tribe at 1-3 (Apr. 14, 2017) (ADAMS Accession No. ML17103A500).

[52] Letter from Trina Lone Hill, THPO, Oglala Sioux Tribe, to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (May 31, 2017) (ADAMS Accession No. ML17152A109) [hereinafter May 31 Letter].

[53] Oglala Sioux Tribe's Response in Opposition to NRC Staff Motion for Summary Disposition of Contentions 1A and 1B (Sept. 1, 2017) at 16 [hereinafter Oglala Sioux Tribe Opposition to 2017 NRC Staff Motion for Summary Disposition].

[54] May 31 Letter at 4-8.

[55] NRC Staff's Motion for Summary Disposition of Contentions 1A and 1B (Aug. 3, 2017) at 27.

[56] *Id.*

[57] LBP-17-9, 86 NRC at 188-90.

[58] *Id.* at 194.

Subsequently, Powertech filed an interlocutory appeal challenging the Board's denial of summary disposition of Contention 1A and requesting the Commission to reverse the decision and to "direct the Staff to supplement the [FSEIS], thereby ending this proceeding."[59] On July 24, 2018, the Commission denied Powertech's petition for review, and upheld the Board's decision.[60] In concluding that Powertech had failed to meet the standard for sustaining an interlocutory appeal, the Commission noted its approval of the Board's explanation that "consultation was necessary to achieve the *end* of meeting NEPA's 'hard look' requirement" and agreed that "the mere act of consultation" would not "in and of itself be sufficient."[61] The Commission also emphasized that "NHPA and NEPA are separate statutes imposing different obligations on the Staff."[62] Furthermore, the Commission found that the Board correctly denied summary disposition on Contention 1A, because a material factual dispute remained over what would "constitute a reasonable method to assess cultural resources at the site."[63]

E. Efforts of the Parties Since LBP-17-9

Pursuant to the Board's October 19, 2017 order denying summary disposition as to Contention 1A,[64] the Board held a number of teleconferences with the parties to monitor their progress on resolving Contention 1A. The first teleconference took place on November 16, 2017, during which the NRC Staff indicated that it was internally discussing next steps and intended to reach out to Powertech and the Oglala Sioux Tribe before the end of the year.[65]

After the first conference, the NRC Staff quickly proposed a new approach for remedying the deficiencies identified in Contention 1A. On December 6, 2017, the NRC Staff sent out its proposed approach to identify Lakota Sioux Tribe historical, cultural, and religious resources.[66] This December proposal aimed to

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[59] CLI-18-7, 88 NRC at 2.

[60] *Id.*

[61] *Id.* at 9.

[62] *Id.*

[63] *Id.*

[64] LBP-17-9, 86 NRC at 173-74.

[65] Licensing Board Order (Requesting Information for Second Telephonic Conference Call) (Nov. 21, 2017) at 2 (unpublished).

[66] Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, Director, Cultural Affairs & Historic Preservation Office, Oglala Sioux Tribe (Dec. 6, 2017) (ADAMS Accession No. ML17340B365) [hereinafter December Proposal]; Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to

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address the Oglala Sioux Tribe's previously-expressed concerns that the NRC Staff secure a contractor, meet with the Tribal Councils or Tribal Leaders of the Lakota Sioux Tribes to discuss the methodology, conduct oral history interviews with tribal elders, and coordinate a field survey at the site.[67] Although the NRC Staff's December proposal deferred selection of a specific survey methodology until a later date so that the participating tribes could provide input while working with the contractor, the NRC Staff proposed that tribal representatives would take approximately two 2-week periods to examine areas of their choosing within the Dewey-Burdock site and help the contractor identify important areas to study in a survey report.[68] The NRC Staff's proposal acknowledged that confidential "information concerning the location of any identified sites of historic, cultural, or religious significance to the tribes may be reported separately and directly to the NRC as a confidential appendix to the survey report so that this information will not be disclosed to the public."[69]

During a second teleconference on December 12, 2017, the parties discussed their initial reactions to the NRC Staff's December proposal.[70] At that time, the Oglala Sioux Tribe and Consolidated Intervenors expressed tentative approval of the proposal.[71] Powertech, however, expressed concern about the potential cost associated with this new approach.[72] On January 19, 2018, the parties provided written responses to the NRC Staff's proposal.[73] The Oglala Sioux Tribe responded that the proposed approach "will provide a reasonable likelihood of satisfying NEPA and resolving the Oglala Sioux Tribe's long-standing NEPA contention with respect to the lack of an adequate cultural resources survey

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John M. Mays, Chief Operating Officer, Azarga Uranium Corp. (Dec. 6, 2017) (ADAMS Accession No. ML17340B374); Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Consolidated Intervenors (Dec. 6, 2017) (ADAMS Accession No. ML17340B376).

[67] December Proposal at 1-2.

[68] *Id.* at 1.

[69] *Id.* at 3.

[70] Licensing Board Order (Scheduling Third Telephonic Conference Call) (Jan. 9, 2018) at 1-2 (unpublished).

[71] Tr. at 1240-43 (Dec. 12, 2017).

[72] Tr. at 1239 (Dec. 12, 2017).

[73] Letter from Trina Lone Hill, Cultural Affairs & Historic Preservation Office, Oglala Sioux Tribe, to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (Jan. 19, 2018) (ADAMS Accession No. ML18019B267) [hereinafter OST Response to December Proposal]; Letter from John Mays, Chief Operating Officer, Powertech (USA) Inc., to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (Jan. 19, 2018) (ADAMS Accession No. ML18019B268) [hereinafter Powertech Response to December Proposal]; Email from David Frankel, Consolidated Intervenors Counsel, to Emily Monteith, NRC Staff Counsel (Jan. 19, 2018, 8:13 PM) (ADAMS Accession No. ML18024A812).

. . . [although] several important details remain to be established" such as "the specific field survey methodology, timing of the surveys, and length of time necessary for the surveys."[74] However, Powertech's response enumerated many concerns, including "exorbitant" costs, lack of well-defined specifics, and ineffective deadlines.[75] Powertech proposed an alternative plan of an ethnographic study, limited solely to a literature survey.[76]

A third teleconference was held on January 24, 2018, to discuss the parties' respective positions on the NRC Staff's December proposal.[77] The Oglala Sioux Tribe continued to assert its general approval, noting that the physical site survey is a fundamental requirement.[78] Powertech, on the other hand, stated its "unequivocal" rejection of the new proposed approach.[79] After hearing from the parties, the Board was concerned that, while the NRC Staff was moving quickly pursuant to the Board's instructions, the other parties were not agreeable to proceeding in a similarly expeditious manner. The Board was particularly concerned that Powertech had "not yet provided the NRC Staff with answers on what components of the NRC Staff's new proposal it would accept and what components it would not."[80] Similarly, the Board was troubled that "the Oglala Sioux Tribe ha[d] yet to prepare a list of other Tribes it contemplates being a part of the survey — let alone reached out to those Tribes to determine if they are willing to participate."[81]

During a fourth teleconference on February 23, 2018, the NRC Staff's counsel suggested that the NRC Staff might be ready to provide the parties with its final decision on a potential method to resolve Contention 1A by the end of March.[82]

II. THE NRC STAFF'S MARCH 2018 APPROACH

A. Development of the Staff's March 2018 Approach

On March 16, 2018, the NRC Staff notified the parties and the Board it

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[74] OST Response to December Proposal at 1-2.

[75] Powertech Response to December Proposal at 3-5.

[76] *Id.* at 7.

[77] Licensing Board Order (Requesting Information for Fourth Telephonic Conference Call) (Feb. 8, 2018) at 2-3 (unpublished) [hereinafter Fourth Teleconference Order].

[78] Tr. at 1273-74 (Jan. 24, 2018).

[79] Tr. at 1292 (Jan. 24, 2018).

[80] Fourth Teleconference Order at 4.

[81] *Id.*

[82] Tr. at 1320 (Feb. 23, 2018).

had selected an approach to resolve Contention 1A.[83] The NRC Staff asserted it chose the March 2018 Approach as a reasonable means to "remedy the deficiencies identified by the Board with respect to the Staff's environmental review of tribal cultural resources that may be affected by the Dewey-Burdock project."[84] The Board held its fifth conference call with the parties on March 27, 2018, to discuss the March 2018 Approach.[85] At that time, "neither Powertech nor the Oglala Sioux Tribe would commit then to participating in the NRC Staff's March 2018 Approach, but indicated they would provide the NRC Staff with a definitive response" by March 30, 2018.[86] The Oglala Sioux Tribe raised concerns about "whether the Tribe would be reimbursed for expenses and compensated for time spent participating in the survey."[87] Powertech did not specify any particular concerns, but would not commit to its previous offers of expense reimbursement.[88] The Board urged the parties to reach an agreement.[89]

On March 30, 2018, the Oglala Sioux Tribe submitted a written response to the NRC Staff on its March 2018 Approach.[90] Overall, the Oglala Sioux Tribe expressed a commitment to participate in the March 2018 Approach, but warned that "the NRC Staff's decisions on [two important] details could significantly affect the extent of the Tribe's participation."[91] The two details that the Oglala Sioux Tribe identified as lacking were (1) "involvement by any of the affected

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[83] Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Trina Lone Hill, Director, Cultural Affairs & Historic Preservation Office, Oglala Sioux Tribe (Mar. 16, 2018) (ADAMS Accession No. ML18075A499) [hereinafter March 2018 Approach]; Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to John M. Mays, Chief Operating Officer, Azarga Uranium Corp. (Mar. 16, 2018) (ADAMS Accession No. ML18075A500); Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Consolidated Intervenors (Mar. 16, 2018) (ADAMS Accession No. ML18075A501); Letter from Emily Monteith, NRC Staff Counsel, to Licensing Board (Mar. 16, 2018) (ADAMS Accession No. ML18075A498) [hereinafter NRC Staff Notification to Board].

[84] NRC Staff Notification to Board.

[85] Licensing Board Order (Requesting Information for Sixth Telephonic Conference Call) (Mar. 29, 2018) (unpublished) (recounting discussion at fifth conference call).

[86] *Id.* at 2.

[87] *Id.* at 2 (citing Tr. at 1357, 1362 (Mar. 27, 2018)).

[88] *Id.* at 2-3 (citing Tr. at 1358-60 (Mar. 27, 2018)).

[89] *See id.* (strongly encouraging each party to consider and discuss reimbursement options); Tr. at 1367-68 (Mar. 27, 2018) ("I don't know if there's anything else that the Board can do at this stage other than to remind the parties that . . . it looks like the last best approach to resolving the remaining contention and that the parties should take this opportunity to work with the staff to resolve this outstanding contention.").

[90] Oglala Sioux Tribe's Response to NRC Staff's March 16, 2018 Cultural Resources Survey Proposal (Mar. 30, 2018) [hereinafter Oglala Sioux Tribe Response to March 2018 Approach].

[91] *Id.* at 1-2.

Tribes in the selection of a qualified contractor"; and (2) information about "reimbursement for costs and staff time of any of the Tribes."[92] Additionally, the Oglala Sioux Tribe reiterated that "the specific field survey methodology ha[d] yet to be established."[93]

On March 30, 2018, Powertech submitted a written response to the March 2018 Approach.[94] Powertech's response catalogued the costs it had already incurred for previous unsuccessful survey efforts related to the Dewey-Burdock site.[95] Powertech argued it could only agree to the March 2018 Approach if the Board (1) established enforceable timelines with repercussions for missed timelines; (2) provided confirmation that Contention 1A would be satisfied through the process; and (3) provided confirmation that any lack of participation by other tribes would not prevent resolution of Contention 1A.[96] Additionally, Powertech argued that the NRC Staff should not pass through as licensing fees the NRC Staff's costs to address Contention 1A.[97]

During an April 6, 2018 teleconference, the Oglala Sioux Tribe explained to the Board that its concerns about involvement in selecting the contractor would not bar its participation, and the "Tribe is comfortable" with the March 2018 Approach timeline.[98] Powertech clarified that it was not refusing to pay reimbursements and honoraria, but that it needed assurances there was a "light at the end of the tunnel."[99] By the end of the teleconference, the Intervenor parties had generally agreed to follow the March 2018 Approach, provided that Powertech would reimburse out-of-pocket costs.[100] At the conference, Powertech's counsel was unable to say whether the company would make such payments, but on April 11, 2018, Powertech confirmed that it "would like the NRC Staff to urgently proceed with the approach and timeline" and that it would pay each participating Lakota Sioux Tribe for lodging and per diem, mileage, and an honorarium.[101] Thus, all the parties accepted the March 2018 Approach as reasonable, and the NRC Staff began to move forward with its implementation,

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[92] *Id.* at 2-3.

[93] *Id.* at 4.

[94] Letter from John M. Mays, Chief Operating Officer, Azarga Uranium Corp., to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review at 1-2 (Mar. 30, 2018) (ADAMS Accession No. ML18089A656).

[95] *Id.* at 1-2.

[96] *Id.* at 3.

[97] *Id.*

[98] Tr. at 1386, 1395 (Apr. 6, 2018).

[99] Tr. at 1401 (Apr. 6, 2018).

[100] Tr. at 1379-80, 1435 (Apr. 6, 2018).

[101] Letter from John M. Mays, Chief Operating Officer, Azarga Uranium Corp., to Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review (Apr. 11, 2018) (ADAMS Accession No. ML18101A223).

in accordance with the parties' expressions of support for the March 2018 Approach and its included timeline.

B. Oglala Sioux Tribe Concerns Addressed by the March 2018 Approach

The March 2018 Approach included five elements as part of the effort to cure the NEPA deficiency in the FSEIS: (1) hiring a qualified contractor; (2) involving other Lakota Sioux Tribes; (3) providing iterative opportunities for the site survey; (4) involving tribal elders; and (5) conducting a site survey using a scientific methodology determined by the contractor in collaboration with the tribes. Each of these elements was repeatedly asked for by the Oglala Sioux Tribe, and once these Oglala Sioux Tribe-requested elements were finally included in NRC Staff's plan to resolve Contention 1A, the parties agreed the March 2018 Approach was a reasonable method for the NRC Staff to satisfy its NEPA obligation.

1. Qualified Contractor

Since the Board first identified a NEPA deficiency in this proceeding, the Oglala Sioux Tribe has repeatedly indicated that hiring a contractor "with the necessary experience, training, and cultural knowledge to carry out and facilitate the survey" is necessary for an acceptable approach to satisfy the NRC Staff's NEPA obligations.[102] To support this request, the Oglala Sioux Tribe pointed out that Dr. Paul Nickens, the contractor hired by the NRC Staff to help carry out the March 2018 Approach, previously testified that use of a facilitator, "along the lines of a cultural anthropologist" who would "provide logistics support, documentation, recording support, report preparation . . . [has] usually been the best approach."[103]

In the March 2018 Approach, the NRC Staff granted the Oglala Sioux Tribe's request and agreed to "onboard[ ] a contractor to facilitate implementation of the approach."[104] The contractor was to "facilitate the survey, and document

[102] *E.g.,* May 31 Letter at 4; *see also* Oglala Sioux Tribe Opposition to 2017 NRC Staff Motion for Summary Disposition, ex. 4, Emails Between Jeffery C. Parsons, Oglala Sioux Tribe Counsel, and David Cylkowski, NRC Staff Counsel, at unnumbered p. 68 (Apr. 28, 2017) ("[T]he Tribe's stated position [is] that key features of a survey should include a qualified contractor to coordinate a survey.").

[103] May 31 Letter at 4 (quoting Transcript of Proceedings, *Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, Neb.), Docket No. 40-8943-OLA, Tr. at 2023 (ADAMS Accession No. ML15244-B278) [hereinafter *Crow Butte* Tr.]).

[104] March 2018 Approach at 1.

findings and supporting information," and subsequently "prepare a survey report documenting the results and findings of the first and second phase of the field survey."[105] Additionally, the contractor would conduct oral history interviews with tribal elders.[106] The NRC Staff awarded the contract for the March 2018 Approach to Dr. Paul Nickens of S. Cohen and Associates (SC&A).[107]

Although the Oglala Sioux Tribe requested that it be involved in the selection of the contractor, NRC Staff counsel made clear that this would not be possible.[108] The Oglala Sioux Tribe, while currently contesting the qualifications of the selected contractor,[109] nonetheless advised that its lack of input on the contractor selection would not prevent it from participating in the March 2018 Approach.[110] Dr. Nickens and his team began working with the Oglala Sioux Tribe on June 1, 2018, to select a methodology for the survey.[111]

2. Involvement of Other Lakota Sioux Tribes

The March 2018 Approach provided for Lakota Sioux Tribes other than the Oglala Sioux Tribe to participate in the site survey and the oral history interviews. While the Oglala Sioux Tribe has recognized that the "NRC Staff is under an obligation to conduct consultation meetings with the Oglala Sioux Tribe specifically," it made clear that "in order to be competent in its analysis of Lakota Sioux cultural resources" and to satisfy its NEPA obligation, "a cultural resources survey must include the other Lakota Sioux tribal governments."[112] The Oglala Sioux Tribe further maintains that being "engaged with and working with its other Sioux tribes" is a "central cultural tenet."[113] Therefore, under the March 2018 Approach the NRC Staff agreed to extend an invitation to Lakota Sioux Tribes that did not take part in the April 2013 survey to participate in the upcoming survey, as well as other elements of the March 2018 Approach, such as the oral history interviews.[114] While these other tribes would not have the

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[105] *Id.* at 2-3.

[106] *Id.* at 4.

[107] NRC Staff Motion, attach. 1, NRC Staff's Statement of Material Facts to Support Motion for Summary Disposition of Contention 1A (Aug. 17, 2018) at 16 [hereinafter NRC Staff Motion Statement of Facts].

[108] Tr. at 1380-81 (Apr. 6, 2018).

[109] Oglala Sioux Tribe's Response in Opposition to NRC Staff Motion for Summary Disposition of Contention 1A (Sept. 21, 2018) at 8 [hereinafter Oglala Sioux Tribe Response to Staff Motion].

[110] Oglala Sioux Tribe Response to March 2018 Approach at 2; Tr. at 1386, 1389 (Apr. 6, 2018).

[111] NRC Staff Motion Statement of Facts at 17.

[112] May 31 Letter at 4.

[113] Tr. at 1291 (Jan. 24, 2018).

[114] March 2018 Approach at 2. The NRC Staff ultimately invited one Dakota Sioux Tribe as well. *See* NRC Staff Motion at 20 n.89.

opportunity to comment on the selected Approach as a whole, they would be able to be involved in selection of the methodology and be able to participate and provide input in the supplementation of the FSEIS.[115]

In response to questions posed by the NRC Staff, the Oglala Sioux Tribe indicated the Standing Rock Sioux and the Rosebud Sioux Tribe would likely be interested in participating in the March 2018 Approach, and confirmed that the NRC Staff should extend invitations to participate to the Standing Rock Sioux Tribe, Rosebud Sioux Tribe, Cheyenne River Sioux Tribe, Yankton Sioux Tribe, Crow Creek Sioux Tribe, and Flandreau Sioux Tribe.[116] Only the Rosebud Sioux Tribe accepted the NRC Staff's invitation to join a webinar conference to discuss the survey methodology and participate in the March 2018 Approach.[117]

While the March 2018 Approach provided an opportunity for other tribes to become involved, the lack of willingness by other tribes to participate would not make this approach unreasonable.[118] Thus, the Board previously made clear:

> [I]f a Tribe doesn't participate, it would be pretty late in the game for them to come forward and try to come at this again. This is the opportunity that the staff has set forth to resolve this contention. And if any party or any entity out there doesn't take advantage of it, they will have missed their chance.[119]

Likewise, the Oglala Sioux Tribe recognized that each tribe is "allowed their own decision on whether or not to be involved in the survey, or the NEPA process more generally."[120]

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[115] *See, e.g.,* Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Kip Spotted Eagle, THPO, Yankton Sioux Tribe (Apr. 12, 2018) (ADAMS Accession No. ML18102B247) (asking for input from other tribes only on their willingness to participate in implementing the chosen approach and establishing a survey methodology).

[116] Notice of Oglala Sioux Tribe's Response to NRC Staff Questions (Feb. 15, 2018) at unnumbered pp. 3-4 [hereinafter Oglala Sioux Tribe February Responses].

[117] Summary of NRC Webinar and Teleconference Call Session to Discuss Survey Methodology for the Dewey-Burdock In Situ Uranium Recovery (ISR) Project at 7-9 (June 29, 2018) (ADAMS Accession No. ML18164A241) [hereinafter NRC Summary of Survey Methodology Sessions] (describing the participation of Ben Rhodd, THPO for the Rosebud Sioux Tribe, in the June 5, 2018 webinar).

[118] *See* Tr. at 1408 (Apr. 6, 2018).

[119] *Id.*

[120] Oglala Sioux Tribe February Responses at unnumbered p. 4.

3. Iterative Opportunities to Survey the Site

As part of a reasonable approach, the Oglala Sioux Tribe has requested the opportunity to make multiple trips to the survey location, declaring:

> [T]he Tribe has always objected to one shot deals, to single visits that somehow bind them and has repeatedly suggested a process that includes a chance to go out into the field and have those boots on the ground, a chance to come back, talk amongst themselves, talk with their elders, go back again to address issues that come up during those talks, come back and iterate this a few times, not ad infinitum, but a few times.[121]

The March 2018 Approach, like the earlier December proposal, provided for "approximately four weeks for a field survey, which could be divided into two separate phases to accommodate the Tribe's desire to conduct a few at a time."[122] Under the March 2018 Approach, Phase One of the survey was scheduled for June 11-22, 2018, and Phase Two was scheduled for September 3-14, 2018.[123] Citing problems settling on a methodology for the survey, Phase One of the field survey effort was terminated by the NRC Staff on June 15, halfway through the scheduled period, and was not completed.[124] Phase Two of the survey was never started. The record indicates that during the nearly two-and-a-half months between the scheduled first and second phases, the NRC Staff did not work to reconcile the issues associated with the selection of a methodology for the site survey.[125]

4. Involvement of the Tribal Elders

The Oglala Sioux Tribe's May 31st Letter asserts that the "ability to use tribal elders" was one of the "cultural needs of the Lakota Sioux" that should be accounted for in crafting a reasonable approach to satisfying the NRC Staff's

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[121] Tr. at 1202 (Nov. 16, 2017).

[122] Tr. at 1236 (Dec. 12, 2017) (describing December Proposal, the precursor to the March 2018 Approach).

[123] March 2018 Approach, encl. 1 [hereinafter March 2018 Approach Timeline].

[124] Email from Emily Monteith, NRC Staff Counsel, to Travis Stills, Oglala Sioux Tribe Counsel (June 15, 2018, 2:39 PM) (ADAMS Accession No. ML18173A263); Letter from Cinthya I. Román, Chief, Environmental Review Branch, Division of Fuel Cycle Safety, Safeguards, and Environmental Review, to Kyle White, Interim Director, Oglala Sioux Tribe Natural Resources Regulatory Agency (July 2, 2018) (ADAMS Accession No. ML18183A304) [hereinafter NRC Staff Letter Discontinuing March 2018 Approach].

[125] *See, e.g.,* Letter from Emily Monteith, NRC Staff Counsel, to Licensing Board (Aug. 1, 2018) [hereinafter NRC Staff August 2018 Status Update] ("The Staff has undertaken no significant curative activities since the Staff's last update on July 2, 2018.").

NEPA obligation.[126] The Oglala Sioux Tribe also noted Dr. Paul Nickens' endorsement of the need to involve tribal elders in any approach, having previously testified that "probably the best [traditional cultural properties] survey approach is to involve Tribal Elders."[127]

The March 2018 Approach incorporated tribal elder involvement in several ways. First, the contractor would conduct "oral history interviews with Tribal Elders of the Lakota Sioux Tribes."[128] These interviews were to focus "on gathering information about resources of significance to the Lakota Sioux Tribes that could be impacted by the Dewey-Burdock ISR project."[129] Additionally, as discussed *supra,* the March 2018 Approach provided for iterative opportunities to visit the survey location to allow for the Oglala Sioux Tribe to consult with its elders after Phase One.

In between Phase One and Phase Two of the field surveys, interviews with tribal elders were scheduled to occur from August 6 to August 17, 2018.[130] These two weeks were also intended to be an "opportunity for the Tribes and NRC staff to discuss preliminary findings and results of the first phase of the field survey."[131] The NRC Staff, however, never reached this element of the March 2018 Approach. The NRC Staff decided to discontinue its efforts because of a breakdown of the survey methodology negotiations, and chose not to move forward with conducting oral history interviews. There is nothing in the record to show that the NRC Staff considered continuing with this element of the March 2018 Approach after terminating its efforts to resolve the site survey methodology issue.

Aside from the cost of renewed efforts, Powertech "appreciate[d] the inclusion of interviews with tribal councils, leaders and elders."[132] The Oglala Sioux Tribe also approved of the "commitment as set forth in its proposal to engage both the Tribal elders and the Tribal councils of multiple Tribes" as "appropriate and welcome."[133]

5. A Scientific Site Survey Methodology

The major impediment to resolving Contention 1A has been the NRC Staff's repeated offering of an "open-site" survey approach as the methodology of com-

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[126] May 31 Letter at 8.
[127] *Id.* (citing *Crow Butte* Tr. at 2023).
[128] March 2018 Approach at 4.
[129] *Id.*
[130] March 2018 Approach Timeline.
[131] March 2018 Approach at 4.
[132] Powertech Response to December Proposal at unnumbered p. 2.
[133] OST Response to December Proposal at 2.

pleting the physical survey of the Dewey-Burdock site. An open-site survey, as the term has been used throughout the proceeding and described by counsel for the Oglala Sioux Tribe, is a survey "where there is no support from NRC staff or contractor . . . [a]nd it is essentially opening the site to the tribes to go out and do what they will do and be totally responsible for providing all the data and the analysis with no set protocol or methodology."[134] The Oglala Sioux Tribe rejected this methodology at least twice before the March 2018 Approach was selected by the NRC Staff on the grounds that such a survey, "with no . . . protocols or approaches identified for making or documenting observations," would be unsuitable for satisfying NEPA.[135] The Oglala Sioux Tribe made clear its position that such a "survey methodology lacks scientific integrity,"[136] and in its May 31st Letter rejecting the "open-site" survey for the second time, the Tribe detailed what it considered appropriate aspects of a survey, including "the types of methodologies that the Tribe expected would be included in any NRC Staff courses of action to remedy the NEPA . . . violations."[137]

The NRC Staff agreed to hire a contractor to facilitate the March 2018 Approach, but chose to defer selection of a survey methodology until the contract was awarded.[138] The March 2018 Approach included five days (May 28 to June 1) for the new contractor, the Oglala Sioux Tribe, and any other participating tribes, to collaborate and agree to a scientifically-valid survey methodology for use at the Dewey-Burdock site.[139] Although the Oglala Sioux Tribe was concerned that "the specific field survey methodology had yet to be established," the Oglala Sioux Tribe looked positively on the opportunity to work with the "NRC Staff and with the benefit of the expertise and experience of the selected contractor" to determine the appropriate methodology for the site survey.[140]

The March 2018 Approach established specific deadlines by which the NRC Staff intended to retain a contractor (mid-April 2018), and hold meetings with any interested tribes (starting May 28, 2018), in preparation for Phase One of the site survey (scheduled for June 11 to June 22, 2018).[141] As described in

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[134] Tr. at 1431 (Apr. 6, 2018).

[135] *See* May 31 Letter at 2, 8 (recounting the numerous times that the Oglala Sioux Tribe has rejected the open-site approach in letters to the NRC Staff).

[136] Pine Ridge Meeting Summary at 2.

[137] Oglala Sioux Tribe Opposition to 2017 NRC Staff Motion for Summary Disposition at 16 (describing May 31 Letter).

[138] March 2018 Approach at 2.

[139] *Id.* at 4 ("Once the NRC staff brings its contractor on board, the NRC plans to hold a meeting with Lakota Sioux Tribes interested in participating in the field survey to discuss and establish the survey methodology and potential areas to be examined during the field survey.").

[140] Oglala Sioux Tribe Response to March 2018 Approach at 4.

[141] March 2018 Approach Timeline.

section II.1 *supra,* the NRC Staff fell behind schedule and notified the tribes of contractor selection on May 16. The NRC Staff then scheduled two webinars during the first week of June to establish a scientific methodology for the site survey. The NRC Staff indicated the purpose of the webinar and teleconference was to "discuss and establish the methodology to be implemented at the field survey and the areas to be examined at the Dewey-Burdock facility."[142] At the webinars, Dr. Nickens presented two potential survey methodologies, both of which involved re-locating previously identified places and documenting them with the tribes' help.[143] After the webinars of June 1 and June 4, and a follow-up teleconference on June 5, Dr. Nickens provided a slightly more detailed survey methodology proposal, the "initial work plan," which included a "windshield survey."[144] This "windshield survey" methodology would involve driving to approximately 3 to 5 locations, prioritizing previously studied sites, and preparation of "daily packages" by the contractors containing any known information on the previously studied sites.[145] The summary of the webinars and teleconference indicates "[t]he NRC contractor discussed a proposed initial work plan for conducting the field survey for consideration by the invited Tribes, but emphasized that he welcomed further comments and modifications from the invited tribes on the proposed plan."[146]

On June 5, 2018, the NRC Staff's contractor provided the invited tribes a proposed plan of work consisting of an initial methodology for conducting the tribal field survey.[147] The NRC Staff's contractor requested comments from the tribes on the proposed plan.[148] The proposed plan of work would have been followed for the first three or four days of the field effort, with subsequent field activities determined in consultation with the participating tribes.[149]

On June 8, 2018, the NRC Staff informed the invited tribes of a meeting location and time for the tribal field survey effort commencing on June 11, 2018.[150]

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[142] NRC Summary of Survey Methodology Sessions at 2.

[143] Slideshow for Webinar, Dr. Paul Nickens (June 1 and 4, 2018) at 22-23 (ADAMS Accession No. ML18152A676).

[144] Proposed Initial Work Plan for Phase 1 Tribal Field Survey at the Dewey-Burdock ISR Project Area, June 11-22, 2018 (June 5, 2018) (ADAMS Accession No. ML18157A092) [hereinafter Proposed Initial Work Plan].

[145] *Id.* at 1.

[146] NRC Summary of Survey Methodology Sessions at 8.

[147] *See generally* Proposed Initial Work Plan.

[148] Email to Invited Tribes from Paul Nickens, SC&A and NRC Contractor (June 5, 2018, 11:24 PM) (ADAMS Accession No. ML18157A108).

[149] Proposed Initial Work Plan at 1.

[150] Emails to Sioux Tribes from Diana Diaz-Toro, NRC Project Manager (June 8, 2018) (ADAMS Accession Nos. ML18163A252, ML18163A241, ML18163A250, ML18163A243, ML18163A256, ML18163A255).

Later that day, the Oglala Sioux Tribe responded to this email requesting the NRC Staff to plan not to go into the field on June 11 and informing the NRC Staff that the Oglala Sioux Tribe would be providing "a detailed response to the work plan today that sets out a proposed daily schedule with time, place, and tasks required to complete the necessary prerequisites."[151] The Oglala Sioux Tribe informed the NRC Staff that "the field survey protocols and methods will be worked out with the benefit of face-to-face discussions between NRC contractors and the Tribe's professional staff, with the benefit of necessary protections for the Tribes' cultural and religious interests."[152]

Subsequently, the Oglala Sioux Tribe sent the NRC Staff and other invited tribes a memorandum describing a proposed schedule for the June tribal field survey effort.[153] The Oglala Sioux Tribe's memorandum set forth several prerequisites to any field activities undertaken with the Oglala Sioux Tribe and a schedule and plan of work for the two weeks of the June tribal field survey effort, which called for the NRC Staff to meet with the Oglala Sioux Tribe in Pine Ridge, South Dakota, on June 11 and 12, 2018, to discuss and agree upon "survey methodologies and protocols."[154] Additionally, the schedule and plan of work included obtaining the Tribe's "THPO Advisory Council approvals for field survey methodology and protection of cultural resources" on June 13, 2018.[155]

C. The Oglala Sioux Tribe's Proposals

On June 11-12, 2018, the NRC Staff's project manager Diana Diaz-Toro and the NRC Staff's contractor, Dr. Paul Nickens, met with Acting THPO Kyle White, and other representatives of the Oglala Sioux Tribe at the Tribal Historic Preservation Offices in Pine Ridge, South Dakota, to continue discussions with the Oglala Sioux Tribe regarding a methodology for the June tribal field survey.[156]

On June 12, 2018, the Tribe presented Ms. Diaz-Toro and Dr. Nickens with a

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[151] Email from Travis Stills, Oglala Sioux Tribe Counsel, to Diana Diaz-Toro, NRC Project Manager (June 8, 2018, 11:33 AM) (ADAMS Accession No. ML18159A585).

[152] *Id.*

[153] Email from Travis Stills, Oglala Sioux Tribe Counsel, to NRC Staff and Sioux Tribes (June 8, 2018, 1:16 PM) (ADAMS Accession No. ML18159A620).

[154] Memorandum from Travis Stills, Oglala Sioux Tribe Counsel, to Diana Diaz-Toro, NRC Project Manager, Paul Nickens, SC&A and NRC Staff Contractor (June 8, 2018) (ADAMS Accession No. ML18159A621) [hereinafter Oglala Sioux Tribe Counsel Memo on Proposed Schedule].

[155] *Id.* at 3.

[156] NRC Staff Motion, attach. 2, Aff. of Diana Diaz-Toro Concerning the NRC Staff's Motion for Summary Disposition of Contention 1A ¶ 9 (Aug. 17, 2018).

memorandum entitled "Discussion Draft — Cultural Resources Survey Methodologies" that contained the following points:[157]

1. The proposal, which was addressed only to Ms. Diaz-Toro and Dr. Nickens, instructed that it "shall not be disclosed or discussed with any federal employee or contractor not specifically addressed in this memo."[158]

2. The proposal stated that "the prerequisites set out in the [June 8, 2018 memo circulated by Travis Stills] must be satisfied before any cultural resource survey activities may take place that involve Lakota peoples or Lakota cultural, historical, or spiritual knowledge."[159]

3. The proposal stated there would be other "preliminary work," not included in the proposal that was to be done during Phase One, and that would be based on an "analysis of publicly available information, and Powertech's proposed [siting] of it[s] facilities."[160]

4. The proposal would entail the involvement and remuneration of several dozen Oglala Sioux Tribe technical staff, spiritual leaders, elders, and warrior society leaders.[161]

5. The proposal would entail using the NRC Staff's contractor for specific aspects of the proposal.[162]

6. The proposal would entail visits and encampments by the Oglala Sioux Tribe elders at the Dewey-Burdock site over several days during the different seasons of the year.[163]

7. The proposal would entail a 10-meter (m) transect-based tribal cultural field survey of the entire Dewey-Burdock site, reasoning that "10-m intervals are required to obtain locations of [traditional cultural properties] which have been overlooked in past archaeological surveys."[164]

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[157] NRC Staff Motion, attach. 3, Memorandum from Kyle White, Acting THPO, Oglala Sioux Tribe, to Diana Diaz-Toro, NRC Project Manager, Emily Monteith, NRC Staff Counsel, and Paul Nickens, SC&A and NRC Contractor (June 12, 2018) (ADAMS Accession No. ML18229A351) (non-public); *see also* NRC Staff Motion Statement of Facts at 20.

[158] NRC Staff Motion Statement of Facts at 20.

[159] *Id.*

[160] *Id.*

[161] *Id.*

[162] *Id.*

[163] *Id.*

[164] *Id.*

8. The proposal would require more than a year to complete the fieldwork associated with the tribal cultural field survey and the oral history research and interviews.[165]

9. By the Oglala Sioux Tribe's estimation, the "full budget to carry out the required survey" would exceed $2 million.[166] The cost estimate for the proposal did not include (i.e., would be in addition to) the costs directly billable to Powertech for the NRC Staff's time and contractor support.[167]

10. The proposal does not take into account or make provision for the involvement of other tribes.[168]

On June 15, 2018, the Oglala Sioux Tribe provided the NRC Staff with the updated version of its June 12, 2018 proposal.[169] The Tribe concluded in its proposal that:

> [i]t is now NRC's task to either accept the OST proposal or to propose an approach that limits the OST-proposed survey methodology to meet what NRC considers a reasonable budget. We also understand that NRC will make the final decision on the type of survey that NRC carries out, and the OST requests the opportunity to review and consult on NRC's proposal before it is finalized.[170]

Nevertheless, that same day the NRC Staff informed the Oglala Sioux Tribe of its decision to discontinue the remainder of the June 11-22 fieldwork effort.[171]

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[165] *Id.* at 21.

[166] *Id.*

[167] *Id.*

[168] *Id.*

[169] NRC Staff Motion, attach. 4, Memorandum from Kyle White, Acting THPO, Oglala Sioux Tribe, to Diana Diaz-Toro, NRC Project Manager, Emily Monteith, NRC Staff Counsel, and Paul Nickens, SC&A and NRC Contractor (June 15, 2018) (ADAMS Accession No. ML18229A352) (non-public); *see also* NRC Staff Motion Statement of Facts at 21-23.

[170] NRC Staff Motion Statement of Facts at 23.

[171] Email from Emily Monteith, NRC Staff Counsel, to Travis Stills Oglala Sioux Tribe Counsel (June 15, 2018, 2:39 PM) (ADAMS Accession No. ML18173A263) (explaining that the NRC Staff is "unable to move forward" given the "significantly different understanding about the progress that has been made this week toward final agreement on a survey methodology"); Email from Emily Monteith, NRC Staff Counsel, to Travis Stills, Oglala Sioux Tribe Counsel, (June 15, 2018, 5:40 PM) (ADAMS Accession No. ML18173A266) (reiterating the NRC Staff's decision as described in the previous email).

D. NRC Staff's Response to the Oglala Sioux Tribe's Proposals

On July 2, 2018, the NRC Staff responded to the Oglala Sioux Tribe's June 12 and June 15 proposals.[172] The NRC Staff informed the Oglala Sioux Tribe that its proposal outlined an approach that is fundamentally incompatible with implementation of the March 2018 Approach, which was previously negotiated with the Oglala Sioux Tribe and parties and presented to the Board.[173] The NRC Staff stated that the Oglala Sioux Tribe's proposal included a wide range of activities and milestones that were not part of the negotiated approach; entailed a significantly larger scope, cost, and time to implement than the selected approach; and did not appear to contemplate the participation of other tribes or the costs associated with involving other tribes in such an approach.[174] And in response to the Oglala Sioux Tribe's June 15, 2018 request to accept its proposal or propose an alternative approach that tailored the Oglala Sioux Tribe's proposal to meet a reasonable budget, the NRC Staff informed the Oglala Sioux Tribe that it considered the selected March 2018 Approach to be a reasonable approach that is not cost-prohibitive, that reflected a reasoned assessment of both scope and cost, and that was premised upon extensive discussions with the Oglala Sioux Tribe and Powertech.[175] The NRC Staff stated that the Oglala Sioux Tribe's participation in the selected March 2018 Approach was essential to that Approach and, given how far apart the Oglala Sioux Tribe's June proposals were from the March 2018 Approach, the NRC Staff and the Oglala Sioux Tribe's approaches could not be reconciled to resolve the outstanding contention in this proceeding.[176] The NRC Staff informed the Oglala Sioux Tribe that the only appropriate course of action was to discontinue its efforts to implement the March 2018 Approach.[177]

Thereafter, in a July 5, 2018 filing the NRC Staff informed the Board that because the Oglala Sioux Tribe's June 12 and June 15 proposals were fundamentally incompatible with the March 2018 Approach, the NRC Staff was discontinuing its efforts to implement the Approach and was requesting that the Board establish a schedule for filing summary disposition motions relative to Contention 1A that would, at the request of the Oglala Sioux Tribe, commence no earlier than August 17, 2018.[178] In response, the Board established

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[172] NRC Staff Letter Discontinuing March 2018 Approach.
[173] *Id.* at 1.
[174] *Id.*
[175] *Id.*
[176] *Id.*
[177] *Id.* at 2.
[178] Motion to Set Filing Deadline for Summary Disposition Motions (July 5, 2018) at 1-2.

the filing schedule for the instant NRC Staff and Oglala Sioux Tribe dispositive motions.[179]

III. STANDARDS FOR SUMMARY DISPOSITION

The standards governing summary disposition in Subpart L proceedings are set out at 10 C.F.R. § 2.1205, and "are based upon those the federal courts apply to motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure."[180] Summary disposition may be granted

> if the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.[181]

This standard establishes a two-part test: First, a board must determine if any material facts remain genuinely in dispute; second, if no such disputes remain, the board must determine if the movant's legal position is correct.[182]

The moving party carries the burden of demonstrating that summary disposition is appropriate and must explain in writing the basis for the motion.[183] To support its motion, the moving party must also "attach . . . a short and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard."[184] "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor."[185]

Alternatively, summary disposition should not be granted if it would require the board to engage in the making of "[c]redibility determinations, the weighing of the evidence, [or] the drawing of legitimate inferences from the facts."[186]

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[179] Licensing Board Order (Establishing Procedures for Filing Motions for Summary Disposition) (July 19, 2018) at 4-5 (unpublished).

[180] *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 297 (2010).

[181] 10 C.F.R. § 2.710(d)(2). Although this proceeding is a simplified hearing governed by Subpart L of the regulations, 10 C.F.R. § 2.1205(c) states that "[i]n ruling on motions for summary disposition, the presiding officer shall apply the standards for summary disposition set forth in subpart G of this part." *Id.* § 2.1205(c).

[182] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-31, 74 NRC 643, 648 (2011).

[183] *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993); 10 C.F.R. § 2.1205(a).

[184] 10 C.F.R. § 2.710(a).

[185] *Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 255 (1986).

[186] *Id.*

Doing so would require the board to "conduct a trial on the written record by weighing the evidence and endeavoring to determine the truth of the matter."[187] Instead, the board's only role in deciding whether to grant a motion for summary disposition is to determine whether any genuine issue of material fact exists.[188]

IV. DISCUSSION

A. The NRC Staff's NEPA Hard-Look Responsibility

1. Legal Standards Under the National Environmental Policy Act

Congress enacted NEPA to protect and promote environmental quality, as well as to "preserve important historic, cultural, and natural aspects of our national heritage."[189] These goals are "realized through a set of 'action-forcing' procedures that require that agencies take a 'hard look' at environmental consequences,"[190] and disseminate that information to the public. Any proposed agency action "significantly affecting the quality of the human environment" requires a detailed environmental impact statement (EIS).[191] Adverse effects include "ecological . . . aesthetic, historic, cultural, economic, social, or health" effects.[192] The Supreme Court has recognized that "one important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences."[193] Such a discussion is important to show that the agency has taken a "hard look."[194] Accordingly, NEPA's implementing regulations require the agency to discuss possible mitigation measures in defining the scope of the EIS,[195] in discussing alternatives to the proposed action,[196] and consequences of that action,[197] and in explaining its ultimate decision.[198] Additionally, the Commission's regulations require the NRC Staff to include in an EIS "an

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[187] *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-16-3, 83 NRC 169, 176 (2016).

[188] *Anderson,* 477 U.S. at 249.

[189] 42 U.S.C. § 4331.

[190] *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 350 (1989) (quoting *Kleppe v. Sierra Club,* 427 U.S. 390, 410 n.21 (1976)).

[191] 42 U.S.C. § 4332(C).

[192] 40 C.F.R. § 1508.8. The NRC is not bound by Council on Environmental Quality regulations; however, the regulations are entitled to considerable deference. LBP-15-16, 81 NRC at 636.

[193] *Robertson,* 490 U.S. at 351.

[194] *Id.* at 352.

[195] 40 C.F.R. § 1508.25(b).

[196] *Id.* § 1502.14(f).

[197] *Id.* § 1502.16(h).

[198] *Id.* § 1505.2(c).

analysis of significant problems and objections raised by . . . any affected Indian tribes and by other interested persons."[199]

However, NEPA does not "mandate particular results,"[200] or require agencies to analyze every conceivable aspect of a proposed project.[201] Those risks that are "remote and speculative" or events that have a low probability of occurring are unnecessary to evaluate.[202] Rather, NEPA analysis must take into account "reasonably foreseeable" results.[203] In assessing impacts, agencies are free to "select their own methodology so long as that methodology is reasonable."[204]

2. The Hard-Look Requirement Has Not Been Met

In both April 2015[205] and October 2017,[206] this Board found that the NRC Staff failed to satisfy its NEPA obligation to address the impacts on tribal cultural, historical, and religious sites at the Dewey-Burdock project site. Specifically, the Board concluded that the NRC Staff "must conduct a study or survey of tribal cultural resources before granting a license."[207] Moreover, since "the cultural, historical, and religious sites of the Oglala Sioux Tribe have not been adequately catalogued, the [EIS] does not include mitigation measures sufficient to protect this Native American Tribe's cultural, historical, and religious sites that may be affected by the Powertech project."[208] Based on the record before us, these deficiencies have yet to be properly remedied. Once more, we conclude that the NRC Staff has failed to fulfill its obligation, and there is a material factual dispute as to the reasonableness of the NRC Staff's implementation of the March 2018 Approach. Accordingly, summary disposition cannot be granted.

The NRC Staff's March 2018 Approach, as agreed to by the parties, constituted a valid and reasonable approach for resolving Contention 1A. In developing the March 2018 Approach, the NRC Staff attempted to address the main concerns previously expressed by the Oglala Sioux Tribe. For example, as described in section II, *supra,* after the Oglala Sioux Tribe challenged the

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[199] 10 C.F.R. § 51.71(b).

[200] *Robertson,* 490 U.S. at 350.

[201] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

[202] *Limerick Ecology Action, Inc. v. NRC,* 869 F.2d 719, 745 (3d Cir. 1989).

[203] *Private Fuel Storage,* CLI-02-25, 56 NRC at 348.

[204] *Pilgrim,* CLI-10-11, 71 NRC at 316 (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)).

[205] LBP-15-16, 81 NRC 618.

[206] LBP-17-9, 86 NRC 167.

[207] LBP-15-16, 81 NRC at 653.

[208] *Id.* at 655.

lack of a trained surveyor or ethnographer to coordinate the site survey, the NRC Staff hired Dr. Paul Nickens to facilitate the survey.[209] Likewise, after the Oglala Sioux Tribe challenged the number of tribes invited to participate in the survey, the NRC Staff not only extended invitations to participate to the Standing Rock Sioux Tribe, Rosebud Sioux Tribe, Cheyenne River Sioux Tribe, Yankton Sioux Tribe, Crow Creek Sioux Tribe, Flandreau Santee Sioux Tribe, and Lower Brule Sioux Tribe,[210] but also coordinated a webinar series and communicated the participation details via letter, email, and telephone call to these tribes.[211] Moreover, after the Oglala Sioux Tribe challenged the length of time provided for the survey, the NRC Staff doubled the amount of time and provided iterative opportunities to survey the site.[212] These efforts by the NRC Staff are commendable and demonstrate that the parties can negotiate with each other to develop and implement an acceptable plan of action to resolve Contention 1A. If the March 2018 Approach had been followed to completion, the NRC Staff's "hard look" into the cultural, historical, and religious sites of the Oglala Sioux Tribe might well have been satisfied.

However, as described *supra* in section II, the entire March 2018 Approach was terminated during the first week of Phase One, and the majority of the agreed upon elements were never fully implemented. The March 2018 Approach designated June 11-22, 2018, as the two weeks for Phase One of the survey, but before the survey could take place, the NRC Staff's contractor had to work with the tribes to find an appropriate survey methodology. A survey was never agreed upon, and, as a result, the first week of the field survey was instead spent discussing an appropriate survey methodology.[213] Further, although the Oglala Sioux Tribe stated its intent to continue with the scheduled "windshield tour" during the second week of Phase One (the week of June 18-22) so as to provide "important information to help prepare for oral interviews and the

[209] NRC Staff Motion at 23.

[210] NRC Staff Motion Statement of Facts at 15, 17.

[211] NRC Staff Motion at 18-20. Only the Rosebud Sioux Tribe accepted the NRC Staff's invitation to join a webinar conference to discuss the survey methodology and participate in the March 2018 Approach, but this does not diminish the NRC Staff's efforts to implement this element. NRC Summary of Survey Methodology Sessions at 7-9 (describing the participation of Ben Rhodd, THPO for the Rosebud Sioux Tribe in the June 5th webinar).

[212] NRC Staff Motion at 22.

[213] *See* Email from Travis Stills, Oglala Sioux Tribe Counsel, to Diana Diaz-Toro, NRC Project Manager (June 8, 2018, 11:33 AM) (ADAMS Accession No. ML18159A585) (refusing to allow Phase One to start on June 11 until a methodology could be agreed upon); Oglala Sioux Tribe Advisory Council Meeting Agenda (June 13, 2018) (ADAMS Accession No. ML18173A206) (listing discussion between NRC, Dr. Nickens, and the Advisory Council regarding the Oglala Sioux Tribe's June 12 cultural resource survey proposal).

September field visits,"[214] the NRC Staff cancelled all further efforts related to the March 2018 Approach, having determined that discontinuation was the only appropriate course of action.[215] This meant that not only was selection of the methodology and the site survey never completed, but several other elements of the March 2018 Approach were not completed either. First, the promised iterative opportunities to visit the site did not occur because, after Phase One was cancelled, Phase Two of the survey never occurred. The record indicates, that during the nearly two and a half months between the scheduled first and second phase, the NRC Staff did not work to reconcile the issues associated with the selection of a methodology for the site survey so that Phase Two might be conducted.[216] Likewise, there were no oral interviews of tribal elders. There is nothing in the record to show that the NRC Staff considered continuing with this element after terminating its efforts to resolve the site survey methodology issue.

The record indicates that while both parties made alienating decisions and caused schedule delays, the NRC Staff has not yet completed the task of taking the "hard look" required by NEPA. The NRC Staff has not implemented the mutually agreed-upon March 2018 Approach or any alternative approach to gather information about sites of cultural, historical, or religious significance to the tribes. Specifically, the NRC Staff did not (1) use its contractor to negotiate a detailed survey methodology that would be acceptable to the Oglala Sioux Tribe; (2) communicate with tribal elders, and identify specific cultural resources of significance to those elders; or (3) go onto the land with representatives of the Oglala Sioux Tribe to document significant tribal sites, and identify specific mitigation measures for impacts of the project on those sites. Instead, the NRC Staff has presented us with its original FEIS from January 2014, supplemented only by information that does not reflect additional survey work and analysis. This is essentially the same material we have previously reviewed and found to be insufficient to resolve Contention 1A.[217] Powertech admits that the only completed effort since the last summary disposition motion, amounting to a literature review report compiled and presented to the Oglala Sioux Tribe as background information for the proposed field survey effort, "is not materially different from information already assessed by NRC Staff in the

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[214] Email from Travis Stills, Oglala Sioux Tribe Counsel, to Emily Monteith, NRC Staff Counsel (June 15, 2018, 3:14 PM) (ADAMS Accession No. ML18170A154).

[215] Email from Emily Monteith, NRC Staff Counsel, to Travis Stills, Oglala Sioux Tribe Counsel (June 15, 2018, 2:39 PM) (ADAMS Accession No. ML18173A263); NRC Staff Letter Discontinuing March 2018 Approach.

[216] *See, e.g.,* NRC Staff August 2018 Status Update ("The Staff has undertaken no significant curative activities since the Staff's last update on July 2, 2018.").

[217] LBP-15-16, 81 NRC at 654-55; LBP-17-9, 86 NRC at 198.

FSEIS and [contains] no new information about sites of historic, cultural, or religious significance to these Tribes."[218] The NRC Staff thus has not fulfilled its NEPA obligation to take a "hard look" at the Dewey-Burdock project's potential adverse impacts to specific cultural, historical, or religious resources of importance to the Oglala Sioux Tribe. Whether the NRC Staff's aborted implementation of the March 2018 Approach, including the survey methodology presented and the NRC Staff's decision to discontinue its efforts, was reasonable remains a question of material fact, not law. At this summary disposition stage, we may not make credibility determinations or weigh the evidence.[219] As a matter of law, the NRC Staff has failed to implement the March 2018 Approach, or otherwise adequately explained why its failure was reasonable.

B. The Staff Likewise Has Failed to Establish the Reasonableness of Its Actions Under CEQ Guidance on NEPA Responsibility When Required Information Is Lacking

Notwithstanding the Staff's failure to obtain additional information so as to establish that it has taken the requisite "hard look" under NEPA, Council of Environmental Quality (CEQ) guidelines provide an alternative approach for addressing such a deficiency. However, as we outline below, material factual disputes make it impossible at this point for the NRC Staff to invoke this guidance as a basis for a merits ruling in its favor on Contention 1A.

1. Legal Standard

Through 40 C.F.R. § 1502.22, the Council on Environmental Quality (CEQ) has provided a legal mechanism for instances when an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment. When the required information "is incomplete or unavailable . . . the agency shall always make clear that such information is lacking."[220] Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the EIS.[221] If, on the other hand, the costs of obtaining the information are exorbitant, the agency must include in the FSEIS:

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[218] Powertech (USA), Inc.'s Response to Pleadings on Legal Standards (Oct. 19, 2018) at 4 (ADAMS Accession No. ML18293A000).

[219] *Anderson,* 477 U.S. at 255.

[220] 40 C.F.R. § 1502.22.

[221] *Id.* § 1502.22(a).

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[222]

This standard provides a route for an agency to satisfy its NEPA obligation by disclosing and explaining its lack of information and providing a discussion of the potential impact to the best of its ability without the relevant information. As was noted *supra,* CEQ regulations are not binding on the agency when they "have a substantive impact on the way in which the Commission performs its regulatory functions."[223] The Commission made clear that it accepts the procedural requirements included in section 1502.22(b),[224] so their applicability in these circumstances continues to be appropriate.

2. The Requirements of 40 C.F.R § 1502.22 Have Not Been Met

In LBP-17-9, we noted that "if the NRC Staff chooses a methodology that does not include complete information about adverse effects on the Tribe's cultural resources, the NRC Staff would need to include an explanation that satisfies the requirements of 40 C.F.R. § 1502.22."[225] We further stated that "if the NRC Staff concludes there is no affordable alternative to the open-site survey for assessing the missing Native American cultural resources, it must at a minimum provide an explanation of this type to satisfy NEPA that is specific to

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[222] *Id.* § 1502.22(b).

[223] *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 444 & nn.94-95 (2011) (quoting Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9352 (Mar. 12, 1984) [hereinafter Final Rule on Environmental Protection Regulations]).

[224] *See* Final Rule on Environmental Protection Regulations at 9356 (Commission has no problems with provisions of section 1502.22(b) under which agency must decide for itself whether the information that is not known is relevant to adverse impacts and, if relevant, whether the information is important to the decision and whether the agency wishes to proceed with the action in the absence of needed information).. This can be contrasted with the worst case analysis provision that previously was a part of this section that, while deemed a substantive requirement, *see id.,* is no longer part of the regulatory text, *compare* National Environmental Policy Act Regulations, 50 Fed. Reg. 32,234, 32,236-37 (proposed Aug. 9, 1985), *with* National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618 (Apr. 25, 1986).

[225] LBP-17-9, 86 NRC at 200.

the cultural resources of the Oglala Sioux Tribe and the other Native American tribes currently missing from the FSEIS."[226]

The NRC Staff now alleges that although it has not conducted a site survey or completed any other aspects of the March 2018 Approach (aside from hiring a contractor), it has satisfied section 1502.22 and thus its NEPA obligations. To justify its failure to implement the March 2018 Approach, the NRC Staff asserts that "the Tribe's unforeseen, eleventh-hour proposal of a new approach [ ] was incompatible with the implementation of the selected approach and greatly exceeded [it], in cost, timeframe, and scope," thereby rendering it "not reasonably feasible for the Staff to obtain the information from the Tribe."[227] As a substitute for the information that would have been obtained through the March 2018 Approach, the NRC Staff offers its original FSEIS from 2014, supplemented by the information in the adjudicatory record of this proceeding.[228] Yet, as we outline below, several material factual disputes exist regarding this NRC Staff explanation that make summary disposition on this point wholly inappropriate.

Moreover, some of these same material factual disputes preclude us from granting the Oglala Sioux Tribe's dispositive motion as well.

3. Disputed Issues of Material Fact Remain

On the record before us, we are unable to conclude that no material factual dispute exists such that either the NRC Staff or the Oglala Sioux Tribe is entitled to judgment as a matter of law. Specifically, we see two key remaining material issues of fact.

i. The Reasonableness of the Survey Methodology

The Oglala Sioux Tribe contests whether the survey methodology, proposed by the NRC Staff and its contractor, as described in section II.5, *supra,* was reasonable. The Oglala Sioux Tribe argues that:

> Due to budget and timing constraints, NRC Staff never prepared a methodology . . . [i]nstead, in preparing for the conference calls and webinars for the purpose of going into the field on June 11, 2018, NRC Staff contractors provided only a basic outline of a work plan limited to a "windshield tour" and [a] revisit [to] the poorly document[ed] sites identified by the 2013 survey — without providing for having any survey methodology in place.[229]

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[226] *Id.*

[227] NRC Staff Motion at 32-33.

[228] *Id.* at 38.

[229] Oglala Sioux Tribe Response to Staff Motion at 6.

As such, the Oglala Sioux Tribe contends, "[t]he initial work plan presented by NRC Staff contained no identifiable scientific methodology for a cultural resources survey" and "constituted nothing more than the equivalent to the 'open-site' survey that the Tribe had repeatedly rejected."[230]

This is not the first time the Oglala Sioux Tribe has raised these objections regarding the methodology being offered by the NRC's contractor. The NRC Staff's memorandum summarizing the interactions between the contractor and the tribes to determine the survey methodology noted that at the June 5th teleconference the Oglala Sioux Tribe objected to the proposed methodology, stating, "beginning the survey on June 11 would be tantamount to an open site survey, and that going out without a methodology in place is objectionable."[231] The Oglala Sioux Tribe additionally restated its concerns with the methodology in an email from its counsel to Dr. Nickens (with the NRC Staff carbon-copied), in which the Oglala Sioux Tribe reiterated that "the work plan looks like NRC Staff's previous use of an open site survey, which has been rejected by the Sioux Tribes and orders of the ASLB, and the Commission."[232] The Oglala Sioux Tribe's counsel stated that Dr. Nickens had acknowledged that "an open site approach is not an accepted methodology."[233] On June 8, the Oglala Sioux Tribe again stated its concerns regarding the "skeletal survey methodology proposal."[234]

The Oglala Sioux Tribe accepted the March 2018 Approach as reasonable to resolve Contention 1A and does not challenge the reasonableness of the March 2018 Approach as written. Further, we agree with the Oglala Sioux Tribe that this should not prevent the Tribe from "maintain[ing] objection[s] to issues regarding a field survey methodology."[235] We also disagree with the NRC Staff that the Oglala Sioux Tribe has not provided support for its description of "the June tribal field survey effort as a mere offer of an open-site survey."[236] Instead, we find that the Oglala Sioux Tribe has raised a material factual dispute as to the reasonableness of the NRC Staff's survey methodology, one important element of the March 2018 Approach.

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[230] *Id.* at 7.

[231] NRC Summary of Survey Methodology Sessions at 8.

[232] Email from Travis Stills, Oglala Sioux Tribe Counsel, to Paul Nickens, SC&A and NRC Staff Contractor (June 6, 2018, 2:30 PM) (ADAMS Accession No. ML18159A134).

[233] *Id.*

[234] Email from Travis Stills, Oglala Sioux Tribe Counsel, to Emily Monteith, NRC Staff Counsel (June 8, 2018, 7:50 PM) (ADAMS Accession No. ML18159A624).

[235] Oglala Sioux Tribe Response to Staff Motion at 9.

[236] NRC Staff Motion at 31.

ii. The Reasonableness of the NRC Staff's Decision to Discontinue Work

A material factual dispute also exists as to the reasonableness of the NRC Staff's decision to discontinue work *completely* on June 15, 2018. We reach this conclusion based on the objections raised by the Oglala Sioux Tribe on this issue.

First, the Oglala Sioux Tribe objects to the NRC Staff's depiction of the June 12 and 15 proposals as an ultimatum.[237] In its pleadings, the Oglala Sioux Tribe claims it "expected NRC Staff to review the Tribe's input and continue working on the methodology."[238] While the NRC Staff contends that the proposals were a constructive rejection, the Oglala Sioux Tribe argues it intended the proposals to "facilitate the discussions and provide NRC Staff and its contractors information on the type of methodologies the Tribe would like to incorporate to the degree possible into the field survey."[239] Contrary to being an ultimatum, the record shows that the Oglala Sioux Tribe actually attempted to restart the negotiation immediately upon being informed that the NRC Staff would be discontinuing its implementation of the March 2018 Approach. In an email dated June 15, counsel for the Oglala Sioux Tribe stated that he believed there had been a "misunderstanding," and reiterating that the Oglala Sioux Tribe still planned to go ahead with the "windshield tour" that was scheduled for the week of June 18.[240] The June 15 email further stated it was "appropriate for the THPO(s) and others to go into the field next week," and could provide "important information to help prepare for oral interviews and the September field visits."[241] The contradicting characterizations of the Oglala Sioux Tribe's June 12 and 15 proposals demonstrate there is a material factual dispute, i.e., whether the new proposals were a constructive rejection, as the NRC Staff seeks to characterize them, or simply were "necessitated by the NRC Staff's continued reliance on an informal open site survey instead of a methodologically sound survey developed by qualified contractors, with the Tribe's input."[242] This dispute impacts the reasonableness of the NRC Staff's decision to discontinue work.

At the same time, we acknowledge that while the Oglala Sioux Tribe characterized the June 12 and June 15 proposals as proposals for a "methodology," those proposals may have been an attempt to renegotiate the entire approach, per

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[237] Oglala Sioux Tribe Response to Staff Motion at 13.

[238] *Id.* at 7.

[239] *Id.*

[240] Email from Travis Stills, Oglala Sioux Tribe Counsel, to Emily Monteith, NRC Staff Counsel (June 15, 2018, 3:14 PM) (ADAMS Accession No. ML18170A154).

[241] *Id.*

[242] NRC Staff Motion at 31 (quoting Oglala Sioux Tribe's Response to NRC Staff Motion to Set Filing for Summary Disposition Motions (July 16, 2018) at 2).

Cite as 90 NRC 287 (2019) **LBP-19-10**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

William J. Froehlich, Chairman
Dr. Mark O. Barnett
G. Paul Bollwerk, III

In the Matter of **Docket No. 40-9075-MLA**
(ASLBP No. 10-898-02-MLA-BD01)

POWERTECH (USA) INC.
(Dewey-Burdock In Situ Uranium Recovery Facility) **December 12, 2019**

This Final Initial Decision concerns Contention 1A, the sole remaining contention before this Licensing Board. Contention 1A is a challenge by the Oglala Sioux Tribe and the Consolidated Intervenors to the NRC Staff's National Environmental Policy Act (NEPA) analysis of the impacts of licensee Powertech (USA), Inc.'s (Powertech) Dewey-Burdock in situ mining operation upon tribal cultural resources. Based on the evidentiary record, the Board finds that the NRC Staff has satisfied its NEPA obligation to take a reasonable hard look at potential impacts on tribal cultural resources. Contention 1A is thus resolved on the merits in favor of the NRC Staff and the proceeding is concluded before the Board.

RULES OF PRACTICE: MIGRATION TENET

A contention "migrates" when a licensing board construes an admitted contention challenging an applicant's environmental review document as a challenge to a subsequently-issued NRC Staff environmental review document without the

petitioner amending the contention. *See Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-15-17, 82 NRC 33, 42 n.58 (2015).

LICENSING BOARD(S): AUTHORITY TO ESTABLISH PROCEDURES

A licensing board generally is not permitted to direct the work of the NRC Staff or to require it to adopt a specific approach to resolve an admitted contention. *See, e.g., Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), — CLI-04-6, 59 NRC 62, 74 (2004); *Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-80-12, 11 NRC 514, 516 (1980).

ATOMIC ENERGY ACT (AEA): MATERIAL LICENSES

The AEA and the Uranium Mill Tailings Radiation Control Act of 1978 authorize the NRC to issue licenses for the possession and use of source material and AEA section 11e(2) byproduct material, both of which are involved in the operation of an in-situ uranium recovery facility. AEA, 42 U.S.C. §§ 2011 *et seq.*; Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S.C. §§ 2022 *et seq.*; *id.* §§ 7901 *et seq.* These statutes require the NRC to license in-situ uranium recovery facilities that meet NRC regulatory requirements developed to protect public health and safety from radiological hazards. In order to operate, in-situ uranium recovery facilities must meet NRC regulatory requirements and obtain a source materials license.

NEPA: PURPOSE OF INQUIRY

Congress enacted NEPA to protect and promote environmental quality, as well as to "preserve important historic, cultural, and natural aspects of our national heritage." 42 U.S.C. § 4331. These goals are "realized through a set of 'action-forcing' procedures that require that agencies take a 'hard look' at environmental consequences," and disseminate that information to the public. *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 350 (1989) (quoting *Kleppe v. Sierra Club,* 427 U.S. 390, 409 n.18 (1976)).

NEPA: EIS; ADVERSE EFFECTS

Any proposed agency action "significantly affecting the quality of the human environment" requires a detailed environmental impact statement (EIS). 42 U.S.C. § 4332(C). Adverse effects include "ecological . . . , aesthetic, historic,

cultural, economic, social, or health" effects. 40 C.F.R. § 1508.8. The Supreme Court has recognized that "one important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences." *Robertson,* 490 U.S. at 351 (referencing Council on Environmental Quality regulation's definition of "mitigation"). Such a discussion is important to show that the agency has taken a "hard look." *Id.* at 352.

NEPA: EIS; MITIGATION

The Council on Environmental Quality (CEQ) implementing regulations for NEPA indicate that an agency should discuss possible mitigation measures in defining the scope of the EIS, in discussing alternatives to the proposed action, and consequences of that action, and in explaining its ultimate decision. 40 C.F.R. §§ 1502.2(c), 1502.14(f), 1502.16(h), 1508.25(b). Additionally, the Commission's regulations require the NRC Staff's EIS to include "an analysis of significant problems and objections raised by . . . any affected Indian tribes and by other interested persons." 40 C.F.R. § 51.71(b).

NEPA: RULE OF REASON

NEPA does not "mandate particular results," *Robertson,* 490 U.S. at 350, or require agencies to analyze every conceivable aspect of a proposed project. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002). NEPA thus gives agencies broad discretion to keep their inquiries within appropriate and manageable boundaries. *Ground Zero Ctr. for Non-Violent Action v. U.S. Navy,* 383 F.3d 1083, 1089-90 (9th Cir. 2004) (citing *No Gwen Alliance of Lane Cty., Inc. v. Aldridge,* 855 F.2d 1380, 1385 (9th Cir. 1988)); *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 631 (2009).

NEPA: RULE OF REASON; METHODOLOGY

In assessing impacts, agencies are free to "select their own methodology so long as that methodology is reasonable." *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 316 (2010) (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)).

NEPA: ADMINISTRATIVE RECORD REVIEW

The NRC's case law establishes that a licensing board may look beyond the

face of the NRC Staff's NEPA document and examine the entire administrative record to determine whether "the Staff's underlying review *was* sufficiently detailed to qualify as 'reasonable' and a 'hard look' under NEPA — even if the Staff's description of that review in the [NEPA document] was not." *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 230 (2007).

NEPA: ADMINISTRATIVE RECORD REVIEW

Even if an EIS prepared by the Staff is found to be inadequate in certain respects, the Board's findings, as well as the adjudicatory record, become, in effect, part of the EIS. *Strata Energy, Inc.* (Ross In Situ Recovery Uranium Project), LBP-15-3, 81 NRC 65, 82 (2015), *aff'd,* CLI-16-13, 83 NRC 566 (2016) (citations omitted), *petition for review denied sub nom. Nat. Res. Def. Council v. NRC,* 879 F.3d 1202 (D.C. Cir. 2018); *see also Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 526 (2008).

NEPA: INCOMPLETE INFORMATION

While a federal agency must analyze environmental consequences in its environmental review where it is reasonably possible to do so, NEPA's rule of reason acknowledges that in certain cases an agency may be unable to obtain information to support a complete analysis. National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618, 15,621 (Apr. 25, 1986); *cf. Robertson,* 490 U.S. at 333, 352-53.

NEPA: INCOMPLETE INFORMATION

The Council on Environmental Quality (CEQ) regulations outline a mechanism for instances when an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment. When the required information "is incomplete or unavailable . . . the agency shall always make clear that such information is lacking." 40 C.F.R. § 1502.22. Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the EIS. *Id.* § 1502.22(a).

NEPA: EXORBITANT COSTS FOR OBTAINING INFORMATION

If, on the other hand, the costs of obtaining the information are exorbitant, the agency must include in the EIS:

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

Id. § 1502.22(b). This standard provides a route for an agency to satisfy its NEPA obligation by disclosing and explaining its lack of information and providing a discussion of the potential impact to the best of its ability without the relevant information.

NEPA: INCOMPLETE INFORMATION

Because "Congress did not enact [NEPA] to generate paperwork or impose rigid documentary specifications," federal courts "are unwilling to give a hypertechnical reading" of regulations like 40 C.F.R. § 1502.22 to require the inclusion of a separate, formal statement in the EIS to the effect that information is incomplete or unavailable where the record in the proceeding supplies the relevant information. *Colo. Envtl. Coal. v. Dombeck,* 185 F.3d 1162, 1172-73 (10th Cir. 1999).

COUNCIL ON ENVIRONMENTAL QUALITY REGULATIONS: IMPACT ON AGENCY

The Commission's "longstanding policy" is that the NRC, as an independent regulatory agency, is not bound by those portions of CEQ's NEPA regulations that, like 40 C.F.R. § 1502.22, "have a substantive impact on the way in which the Commission performs its regulatory functions." *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 444 & nn.94-95 (2011) (quoting Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9352 (Mar. 12, 1984)). The Commission may look to 40 C.F.R. § 1502.22 for guidance, but it is not controlling. *See* CLI-19-9, 90 NRC 121, 135 (2019); *Diablo Canyon,* CLI-11-11, 74 NRC at 443-44; *North Anna ESP,* CLI-07-27, 66 NRC at 235-36 & n.115; *Pacific Gas*

and Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 12 (2008).

COUNCIL ON ENVIRONMENTAL QUALITY REGULATIONS: IMPACT ON AGENCY

The Commission has "consistently directed the Staff to undertake reasonable efforts to obtain unavailable information." CLI-19-9, 90 NRC at 135. This observation is fully in line with the CEQ's explanation in the statement of consideration for the rule adopting section 1502.22 that this provision is intended to fulfill the goal of the "acquisition of [incomplete or unavailable] information if reasonably possible." National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618, 15,620 (Apr. 25, 1986).

RULES OF PRACTICE: BURDEN OF PROOF (NEPA ISSUES)

Generally, an applicant has the burden of proof in a licensing proceeding. The statutory obligation of complying with NEPA, however, rests with the NRC. *See, e.g., Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983). Accordingly, for contentions asserting failure to comply with NEPA, the burden of proof is on the NRC Staff. 10 C.F.R. § 2.325.

RULES OF PRACTICE: BURDEN OF PROOF (NEPA ISSUES)

For the NRC Staff to prevail on factual issues in an evidentiary hearing related to a NEPA contention, the standard of proof that it must attain is preponderance of the evidence. *See Diablo Canyon,* CLI-08-26, 68 NRC at 521. Generally, the factual showing supporting the NRC Staff's NEPA analysis is considered inadequate if the evidentiary record establishes that the Staff "has failed to take a 'hard look' at significant environmental questions — i.e., the Staff has unduly ignored or minimized pertinent environmental effects." *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003).

NEPA: EXORBITANT COSTS FOR OBTAINING INFORMATION

The CEQ regulations in 40 C.F.R. § 1502.22 pose the question as to whether the information "cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known," bearing in mind that "the term 'overall costs' encompasses financial costs and other costs such as costs in

terms of time (delay) and personnel." CEQ Incomplete/Unavailable Information Regulations, 51 Fed. Reg. at 15,622.

NEPA: ADMINISTRATIVE RECORD REVIEW

In an appropriate circumstance, a deficiency in an agency NEPA statement can be rectified by a licensing board based on the record of an evidentiary hearing regarding an intervenor contention challenging that environmental statement. *See, e.g., Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-262, 1 NRC 163, 196 n.54 (1975); *Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 371 (1975); *Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1013 (1973) (citation omitted); *Calvert Cliffs' Coordinating Comm., Inc. v. AEC,* 449 F.2d 1109, 1114 (D.C. Cir. 1971), *cert. denied,* 404 U.S. 942 (1972).

NEPA: ENVIRONMENTAL IMPACT STATEMENT (SUPPLEMENTATION)

A NEPA deficiency identified in an adjudication can trigger the need to prepare an EIS supplement. Thus, mirroring the 10 C.F.R. Part 51 provision regarding EIS supplementation, NRC decisions have recognized supplementation may be required in certain circumstances. One circumstance is when "the absence of discussion in a [final EIS] is so fundamental an omission as to call for recirculation of the [final EIS]." *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), ALAB-660, 14 NRC 987, 1014 (1981). Another circumstance is if "the proposed project has been so changed by the Board's decision as not to have been fairly exposed to public comments during the initial circulation of the [final EIS]." *Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 786 (1979). Another circumstance is when the evidence presented by the NRC Staff at a hearing "depart[s] so markedly from the positions espoused or information reflected in the [final EIS] as to require formal redrafting and recirculation for comment." *Allied-General Nuclear Services* (Barnwell Nuclear Fuel Plant Separations Facility), ALAB-296, 2 NRC 671, 680 (1975).

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FINAL INITIAL DECISION

I. INTRODUCTION

This Final Initial Decision concerns Contention 1A, the sole remaining contention before this Licensing Board.[1] Contention 1A is a challenge by the Oglala Sioux Tribe and the Consolidated Intervenors to the U.S. Nuclear Regulatory Commission Staff's (NRC Staff) National Environmental Policy Act (NEPA) analysis of the impacts of licensee Powertech (USA), Inc.'s (Powertech) Dewey-Burdock in situ mining operation upon tribal cultural resources.[2] In LBP-15-16, relative to Contention 1A, this Board held that the NRC Staff's obligation to assess the impacts to cultural resources under NEPA had not been satisfied.[3] We

[1] This decision, the sixth reported decision issued by this Board, is denominated as a final initial decision because it resolves all the remaining issues in this proceeding. LBP-10-16, issued August 5, 2010, ruled on petitions to intervene and requests for hearing. LBP-10-16, 72 NRC 361 (2010). LBP-13-9, issued July 22, 2013, ruled on the admissibility of new and amended contentions. LBP-13-9, 78 NRC 37 (2013). LBP-15-16, issued April 30, 2015, was a partial initial decision that upheld the NRC Staff's issuance of Source Materials License SUA-1600 and imposed additional license conditions, while requiring further NRC Staff action in connection with Contentions 1A and 1B. LBP-15-16, 81 NRC 618 (2015), *petitions for review granted in part and denied in part,* CLI-16-20, 84 NRC 219 (2016). LBP-17-9, issued October 19, 2017, granted summary disposition of Contention 1B and denied summary disposition as to Contention 1A. LBP-17-9, 86 NRC 167 (2017), *petition for review denied,* CLI-18-7, 88 NRC 1 (2018). LBP-18-5, issued October 30, 2018, denied cross-motions for summary disposition as to Contention 1A. LBP-18-5, 88 NRC 95 (2018), *petition for review denied,* CLI-19-9, 90 NRC 121 (2019).

[2] Contention 1A is part of the original admitted Contention 1 that read "Powertech's Application is deficient because it fails to address adequately protection of historical and cultural resources." LBP-10-16, 72 NRC at 444.

[3] LBP-15-16, 81 NRC at 655. Throughout this proceeding and in the exhibits in the record, various terms have been used to describe the artifacts (i.e., objects made or modified by human behavior), features (i.e., indications of non-portable human activity), and locations of significance to Native American Tribes that may exist on the Dewey-Burdock project site (e.g., "cultural, religious, and

(Continued)

now consider the efficacy of the NRC Staff's efforts to resolve this contention since the issuance of LBP-15-16. In particular, this requires that we resolve disputed issues of fact about the reasonableness of both (1) the NRC Staff's proposed draft methodology for the conduct of a site survey to identify cultural resources of significance to the Oglala Sioux Tribe at the Dewey-Burdock site; and (2) the NRC Staff's determination that its NEPA obligations have been fulfilled because necessary cultural resources information is unavailable. Based on the evidentiary record before us, including the prefiled and evidentiary hearing testimony of the parties' witnesses and the documentary material identified and admitted into evidence,[4] in this Final Initial Decision we conclude that the NRC Staff has carried its burden of proof to establish it has satisfied its obligations under NEPA with regard to cultural resources impact assessment. Contention

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historical resources," "traditional cultural properties," "traditional cultural places," "tribal cultural resources," "traditional cultural landscape"). *See, e.g.,* Ex. NRC-214, Proposed Draft Cultural Resources Site Survey Methodology at 5-6 (defining and discussing "traditional cultural landscape" and "traditional cultural property") [hereinafter February 2019 Methodology]; Tr. at 1846-52 (Aug. 28, 2019) (Spangler). For purposes of this decision, in which we are considering the propriety of the parties' actions associated with creating the framework for NEPA evaluation of such cultural materials and places, we will use the simplified term "cultural resources" to refer to the important items and locations on the Dewey-Burdock project site that may be of interest to intervenor Oglala Sioux Tribe and any other Sioux Tribes potentially participating in the NRC survey process at issue under Contention 1A. *See* Ex. NRC-214, February 2019 Methodology at 7; *infra* note 180. Also for simplification, unless otherwise indicated (e.g., when we refer to the Oglala Sioux Tribe in its capacity as a party to this proceeding), the terms "Oglala Sioux Tribe," "Tribe(s)," or "Tribal" hereinafter incorporate all potential tribal survey participants.

[4] As entered into the record and incorporated into the electronic hearing docket (EHD) associated with the agency's ADAMS document management system, the official exhibit number for each evidentiary item in this proceeding reflects a three-letter party or Licensing Board identifier (i.e., OST, INT, NRC, APP, BRD); followed by three numeric characters to reflect its number; followed in some instances by an additional alpha designation (e.g., A, B, etc.) that, if used, indicates it is one part of a multi-part exhibit, and another alpha character (i.e., -R) to indicate that the exhibit was revised after its original submission as a prefiled exhibit (e.g., admitted exhibit NRC-176-R would be a revised version of prefiled exhibit NRC-176); followed by a two-character numeric identifier (i.e., 00) that identifies the exhibit as being used in a contested case (as opposed to a mandatory/uncontested proceeding (i.e., MA)); followed by the designation BD01, which indicates that this Licensing Board (i.e., BD01) was involved in its identification and/or admission. Accordingly, the official designation for prefiled exhibit NRC-176-R, as ultimately admitted, is NRC-176-R-00-BD01. For ease of reading, however, we will refer to all exhibits identified for the record in this proceeding without the final six characters that make up their official designation.

Additionally, we note that while each of the identified exhibits in this proceeding includes a cover sheet that provides the prefiled exhibit number for the document and its title, for purposes of citing an exhibit we will disregard the cover sheet and use the pagination marked on the exhibit or, in instances when there is no marked pagination for the exhibit, the pagination for the portable document format (PDF) file version of the exhibit that is found in the EHD, designated as such (e.g., Ex. XXXYYY at PDF 1).

1A thus is resolved on the merits in favor of the NRC Staff, thereby concluding this proceeding before the Board.

II. PROCEDURAL HISTORY

A. Procedural History Preceding the 2015 Partial Initial Decision

In 2009, Powertech submitted a license application to construct and operate the proposed Dewey-Burdock in situ uranium recovery (ISR) facility in Custer and Fall River Counties, South Dakota.[5] Consolidated Intervenors (consisting of two individuals and six organizations) filed a request for hearing and a petition for leave to intervene on March 8, 2010.[6] The Oglala Sioux Tribe filed a separate request for hearing and petition for leave to intervene on April 6, 2010.[7] The Board held oral argument on the petitions[8] and admitted the Oglala Sioux Tribe and Consolidated Intervenors as intervenors to the proceeding.[9]

After the Draft Supplemental Environmental Impact Statement (DSEIS) was issued in 2012,[10] the Oglala Sioux Tribe and Consolidated Intervenors filed new and amended contentions.[11] Of these, the Board admitted nine, two of which concerned historic and cultural resources issues.[12] Then in March 2014,

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[5] [Powertech]'s Application for a[n NRC] Uranium Recovery License for Proposed Dewey-Burdock In Situ Leach Uranium Recovery Facility in South Dakota (Aug. 2009) (ADAMS Accession No. ML092870153); Dewey-Burdock Project Supplement to Application for NRC Uranium Recovery License Dated February 2009 (Aug. 2009) (ADAMS Accession No. ML092870155).

[6] Consolidated Request for Hearing and Petition for Leave to Intervene (Mar. 8, 2010).

[7] Petition to Intervene and Request for Hearing of the Oglala Sioux Tribe (Apr. 6, 2010).

[8] Tr. at 1-405 (June 8-9, 2010). Throughout this proceeding, beginning with the oral argument on standing and contention admissibility in 2010, in all but a limited number of instances, the transcripts have continued with sequential numbering. To avoid any confusion, for each transcript citation in this decision we provide the date of the transcript as well.

[9] LBP-10-16, 72 NRC at 376. The Board admitted four of the Oglala Sioux Tribe's contentions and three of the Consolidated Intervenors' contentions. *Id.* at 443-44.

[10] Exs. NRC-009-A-1 through NRC-009-B-2, Office of Federal and State Materials and Environmental Management Programs (FSME), NRC, 1-2 Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, Draft Report for Comment, NUREG-1910 (supp. 4 Nov. 2014) [hereinafter DSEIS]. Ex. NRC-009-A-1 is DSEIS volume 1, chapters 1 through 3. Ex. NRC-008-A-2 is DSEIS volume 1, chapter 4. Ex. NRC-009-B-1 is DSEIS volume 2, chapters 5 through 7. Ex. NRC-009-B-2 is DSEIS volume 2, chapters 8 through 11 and appendices A through D.

[11] *See* List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013); Consolidated Intervenors' New Contentions Based on DSEIS (Jan. 25, 2013).

[12] LBP-13-9, 78 NRC at 112-13. The seven original contentions contesting the adequacy of various aspects of Powertech's Environmental Report migrated as challenges to the applicable portions of

(Continued)

in accordance with 10 C.F.R. Part 51, the NRC Staff issued its Final Supplemental Environmental Impact Statement (FSEIS),[13] which concluded that the overall potential impacts to cultural resources from the Dewey-Burdock project would range from "SMALL" to "LARGE."[14] Thereafter, the previously-admitted DSEIS-based contentions migrated[15] as challenges to the FSEIS.[16] At about the same time, the NRC Staff finalized a programmatic agreement (PA) for the Dewey-Burdock project to govern cultural resources matters that might arise during post-licensing construction and operations at the Dewey-Burdock facility.[17] On April 8, 2014, the NRC Staff issued the Record of Decision (ROD) documenting the NEPA-review associated aspects of the NRC Staff's decision

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the DSEIS. *Id.* at 50. The Board reformulated several of the original seven contentions for a total of five admitted contentions. In addition, of the three new DSEIS-based contentions that were admitted, one was split into two contentions, producing four new contentions and yielding a total of nine contentions in all. *Id.* at 112-13.

[13] Exs. NRC-008-A-1 through NRC-008-B-2, FSME, NRC, 1-2 Supplement to the [GEIS] for In-Situ Leach Uranium Milling Facilities, Final Report, NUREG-1910 (supp. 4 Jan. 2014) [hereinafter FSEIS]. Ex. NRC-008-A-1 is FSEIS volume 1, chapters 1 through 3. Ex. NRC-008-A-2 is FSEIS volume 1, chapters 4 and 5. Ex. NRC-008-B-1 is FSEIS volume 2, chapters 6 through 11. Ex. NRC-008-B-2 is FSEIS volume 2, appendices A through F.

[14] Ex. NRC-008-A-2, FSEIS at 4-156 to -189, 5-18. As the FSEIS notes, the designation "SMALL" signifies that "[t]he environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource," while "LARGE" signifies that "[t]he environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource." Ex. NRC-008-A-1, FSEIS at xxxii.

[15] A contention "migrates" when a licensing board construes an admitted contention challenging an applicant's environmental review document as a challenge to a subsequently-issued NRC Staff environmental review document without the petitioner amending the contention. *See Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-15-17, 82 NRC 33, 42 n.58 (2015).

[16] LBP-15-16, 81 NRC at 631-32. Subsequently, two of the nine admitted contentions (Contentions 14A and 14B) were voluntarily withdrawn by the Oglala Sioux Tribe. *Id.* at 633.

[17] Exs. NRC-018-A through NRC-018-H, Programmatic Agreement Among [NRC], U.S. Bureau of Land Management [(BLM)], South Dakota State Historic Preservation Office [(SD SHPO)], [Powertech], and Advisory Council on Historic Preservation [(ACHP)] Regarding the Dewey-Burdock In Situ Recovery Project Located in Custer and Fall River Counties, South Dakota (Mar. 19, 2014) [hereinafter Programmatic Agreement]; *see* 36 C.F.R. §§ 800.4(b)(2), 800.14(b). As its title reflects, the PA was adopted with the approval of the federal ACHP and the BLM, the South Dakota SHPO, and Powertech. *See* LBP-15-16, 81 NRC at 649. The substance of the PA is found in Ex. NRC-018-A, while NRC-018-B is a compilation of PA appendices regarding such matters as cultural resource identification and consultation efforts, monitoring plan reporting criteria, and human remains treatment, and NRC-018-C through NRC-018-H are the executed NRC, BLM, SD SHPO, ACHP, and Powertech PA signature pages along with an ACHP cover letter that accompanied its signature page.

to issue a materials license to Powertech for its proposed Dewey-Burdock facility.[18]

That same day, acting pursuant to 10 C.F.R. § 2.1202(a) and prior to a hearing on the admitted contentions, the NRC Staff issued a Part 40 source materials license to Powertech.[19] This license authorizes Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock project.[20] On April 11, 2014, the NRC Staff and the Oglala Sioux Tribe filed motions seeking summary disposition regarding some of the admitted contentions.[21] Both motions were denied by the Board.[22] The Board then held an evidentiary hearing in Rapid City, South Dakota, from August 19-21, 2014, on the remaining seven admitted contentions.[23]

B. The 2015 Partial Initial Decision

On April 30, 2015, the Board issued a Partial Initial Decision on the merits of the seven Oglala Sioux Tribe and Consolidated Intervenors contentions that were the subject of the August 2014 evidentiary hearing.[24] The Board's Partial Initial Decision resolved all but two of these contentions in favor of the NRC Staff and Powertech. The other two contentions, Contentions 1A and 1B, were resolved in favor of the Oglala Sioux Tribe and Consolidated Intervenors.[25]

Regarding Contention 1A, the Board held that the FSEIS did not adequately assess the project's impacts on Native American cultural resources.[26] The Board found that the NRC Staff failed to fulfill this NEPA obligation because the

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[18] Ex. NRC-011, [NRC] Record of Decision for the Dewey-Burdock Uranium In-Situ Recovery Project in Custer and Fall River Counties, South Dakota (Apr. 8, 2014) [hereinafter ROD].

[19] Ex. NRC-012, Materials License SUA-1600, Powertech (USA), Inc. (Apr. 8, 2014) [hereinafter Powertech License].

[20] LBP-15-16, 81 NRC at 632. On April 30, 2014, the Board granted a temporary stay of the effectiveness of the NRC Staff's action issuing the Dewey-Burdock license in response to motions to stay from both intervenors. *Id.* However, after oral argument on those motions, the Board denied the motions and lifted the temporary stay. Licensing Board Order (Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600) (May 20, 2014) (unpublished).

[21] NRC Staff's Motion for Summary Disposition on Safety Contentions 2 and 3 (Apr. 11, 2014) (seeking summary disposition on the safety aspects of Contentions 2 and 3); Oglala Sioux Tribe's Motion for Summary Disposition [on NEPA] Contentions 1A and 6 - Mitigation Measures (Apr. 11, 2014) (seeking summary disposition of NEPA issues in Contentions 1A and 6).

[22] Licensing Board Order (Denying Motions for Summary Disposition) (June 2, 2014) at 7 (unpublished).

[23] Tr. at 921-1170 (Aug. 20, 2014), 1171-328 (Aug. 21, 2014).

[24] LBP-15-16, 81 NRC at 708-11.

[25] *Id.* at 708-10.

[26] *Id.* at 653.

FSEIS did "not contain an analysis of the impacts of the project on the cultural, historical, and religious sites of the Oglala Sioux Tribe and the majority of the other consulting Native American tribes."[27] Accordingly, the Board concluded that "[w]ithout additional analysis as to how the Powertech project may affect the Sioux Tribes' cultural, historical, and religious connections with the area, NEPA's hard look requirement has not been satisfied, and potentially necessary mitigation measures have not been established."[28]

With respect to Contention 1B, the Board held that the NRC Staff did not satisfy its National Historic Preservation Act (NHPA) obligation for government-to-government consultation with the Oglala Sioux Tribe.[29] The Board concluded that to satisfy this NHPA consultation requirement, the NRC Staff must undertake additional consultation with the Oglala Sioux Tribe, which is the tribe with "the most direct historical, cultural, and religious ties to the area."[30]

The Board retained jurisdiction of this proceeding pending further consultations and required the NRC Staff to submit monthly status reports describing its consultations with the Oglala Sioux Tribe and the steps being taken to identify cultural resources impacted by the Powertech facility.[31]

C. Initial Efforts at Survey Development and the 2017 Summary Disposition Decision

After the issuance of the 2015 Partial Initial Decision, the NRC Staff and the Oglala Sioux Tribe exchanged a series of letters and met in Pine Ridge, South Dakota, on May 19, 2016.[32] During that meeting, the Oglala Sioux Tribe shared its concerns about the surveys conducted at the Powertech site to identify cultural resources, the lack of meaningful opportunities in the Dewey-Burdock PA for tribes to provide input about the management of these resources, and the continued effectiveness of the license.[33] However, between June 2015 and November 2016, the NRC Staff and the Oglala Sioux Tribe made essentially no substantive progress toward agreement regarding a method to collect the missing

[27] *Id.* at 655.

[28] *Id.*

[29] *Id.*

[30] *Id.* at 656.

[31] *Id.* at 658. Although all the parties to the proceeding appealed the Board's decision in LBP-15-16, none sought a stay of the Board's rulings retaining jurisdiction and having the parties engage in activities designed to help resolve the deficiencies identified in connection with Contentions 1A and 1B, an approach that ultimately was upheld by a majority of the Commission. *See* CLI-16-20, 84 NRC at 221-22.

[32] *See* LBP-17-9, 86 NRC at 179-80.

[33] *See id.*

cultural resources data.[34] The Board, therefore, convened the first of a series of teleconferences with the parties on November 7, 2016.[35] On November 23, 2016, the NRC Staff invited the Oglala Sioux Tribe to meet to discuss the parameters of an additional cultural resources survey of the Dewey-Burdock site and the Oglala Sioux Tribe's recommendations concerning the Dewey-Burdock PA.[36]

On May 31, 2017, the Oglala Sioux Tribe's Tribal Historic Preservation Officer (THPO) sent a detailed letter regarding the protocols the Tribe sought for an additional site survey. These protocols included asking the NRC Staff to engage a qualified contractor, involving other Sioux Tribes, involving tribal elders, and allowing for multiple site trips.[37] The NRC Staff replied that after more than two years, "further consultation [was] unlikely to result in a mutually acceptable settlement of the dispute," and that it had satisfied its consultation responsibilities.[38]

On August 3, 2017, the NRC Staff moved for summary disposition of Contentions 1A and 1B.[39] In LBP-17-9, the Board found that the NRC Staff's consultation efforts had satisfied NHPA requirements and granted summary disposition of Contention 1B.[40] Nonetheless, the Board denied summary disposition of Contention 1A, noting that the NRC Staff had performed no additional site survey and the deficiencies in the FSEIS cultural resources discussion remained.[41]

D. The NRC Staff's March 2018 Approach, the Oglala Sioux Tribe's June 2018 Proposals, and the Board's 2018 Summary Disposition Decision

Following the issuance of LBP-17-9, the Board held several teleconferences with the parties to monitor their progress on resolving Contention 1A. During the first teleconference on November 16, 2017, the NRC Staff revealed that it was working on a path forward that it hoped to present to the other parties in the next several weeks.[42] In line with this representation, on December 6, 2017,

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[34] *See id.* at 180.

[35] Licensing Board Order (Scheduling Telephonic Status Conference) (Oct. 24, 2016) (unpublished); *see also* Tr. at 1-61 (Nov. 7, 2016).

[36] Ex. NRC-187, NRC November 23, 2016 Letter to the Oglala Sioux Tribe Regarding an Invitation for Teleconference and Continued Consultation.

[37] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter Responding to NRC's April 14, 2017 Letter at 3-8 [hereinafter Oglala Sioux Tribe May 31, 2017 Letter].

[38] NRC Staff's Motion for Summary Disposition of Contentions 1A and 1B (Aug. 3, 2017) at 27.

[39] *Id.*

[40] LBP-17-9, 86 NRC at 188-90.

[41] *Id.* at 194.

[42] Tr. at 1188-90 (Nov. 16, 2017).

the NRC Staff sent the Oglala Sioux Tribe a proposed approach to identify Tribal cultural resources.[43] This proposal aimed to address the Oglala Sioux Tribe's previously-expressed concerns that the NRC Staff secure a contractor, meet with the tribal councils or tribal leaders of multiple Tribes to discuss the methodology, conduct oral history interviews with Tribal elders, and coordinate a field survey at the site.[44]

During a teleconference held on December 12, 2017, the Oglala Sioux Tribe and Consolidated Intervenors expressed tentative approval of the proposal.[45] On January 19, 2018, the parties provided written responses to the NRC Staff's proposal.[46] Trina Lone Hill, the Oglala Sioux Tribe's THPO, responded that the proposed approach "will provide a reasonable likelihood of satisfying NEPA and resolving the Oglala Sioux Tribe's long-standing NEPA contention with respect to the lack of an adequate cultural resources survey . . . [although] several important details remain to be established" such as "the specific field survey methodology, timing of the surveys, and length of time necessary for the surveys."[47] At the Board's third teleconference on January 24, 2018, while continuing to express its general approval of the NRC Staff's approach, the Oglala Sioux Tribe asserted that the physical site survey is a fundamental requirement for providing the information necessary to fulfill the NRC Staff's NEPA analysis responsibilities.[48]

On March 16, 2018, the NRC Staff notified the parties and the Board it had taken into account the concerns of the Oglala Sioux Tribe and selected an approach to obtain additional information on cultural resources of significance that would resolve Contention 1A.[49] Known as the March 2018 Approach, this proposal included five elements designed to cure the Board-identified deficiency in the FSEIS while addressing Oglala Sioux Tribe-identified concerns: (1) hiring a qualified contractor to facilitate implementation of the approach; (2) involving other Tribes in the site survey process; (3) providing iterative opportunities for

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[43] *See* Ex. NRC-191, NRC Staff December 6, 2017 Letter to Trina Lone Hill, Oglala Sioux Tribe, Regarding US Nuclear Regulatory Commission Proposal to Identify Historic, Cultural, and Religious Sites [hereinafter NRC Staff December 6, 2017 Letter].

[44] *Id.* at 1-2.

[45] Tr. at 1240-43 (Dec. 12, 2017).

[46] *See* Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response to NRC's December 6, 2017 Letter [hereinafter Oglala Sioux Tribe January 19, 2018 Response]; LBP-18-5, 88 NRC at 108 n.73.

[47] Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response at 1-2.

[48] Tr. at 1273-74 (Jan. 24, 2018); *see* Ex. BRD-006, February 6, 2018 Notice of Summary Report of Counsel Conference Call with Attached Summary of Counsel-to-Counsel Meeting Held on February 1, 2018 ("Both [Consolidated Intervenors and the Oglala Sioux Tribe] confirmed that a physical site survey remains a fundamental requirement for resolution of the outstanding contention.").

[49] Ex. NRC-192, NRC March 16, 2018 Letter to Oglala Sioux Tribe Transmitting NRC's Approach to Identify Historic, Cultural, and Religious Sites [hereinafter March 2018 Approach].

the Tribal site survey; (4) involving Tribal elders; and (5) conducting a site survey using a scientific methodology determined by the contractor in collaboration with the Tribes.[50] All parties expressed support for the March 2018 Approach, with the Oglala Sioux Tribe stating it was comfortable with the March 2018 Approach's timeline.[51] Multiple steps were built into this timeline: first, beginning the field survey process in mid-June 2018 for a two-week period; second, holding meetings between the NRC Staff and its contractor and Tribal leaders to discuss preliminary survey findings as well as conducting oral history interviews with Tribal elders over a two-week period in mid-August 2018; third, conducting a second phase field survey during a two-week period in early September 2018; fourth, providing a draft survey report and draft oral history interviews to participating Tribes for a thirty-day comment period in late October 2018 and sharing final versions of those documents for Tribal review in late December 2018; fifth, providing a draft supplement to the FSEIS in mid-February 2019 for a 45-day public comment period; and finally, publishing a final supplemental FSEIS analysis in late May 2019.[52]

Yet, just before the initial site survey was scheduled to begin, the Oglala Sioux Tribe presented the NRC Staff with an alternative survey proposal.[53] On June 11-12, 2018, Diana Diaz-Toro (NRC Staff project manager) and Dr. Paul Nickens (the contractor retained by the NRC Staff to develop and implement the survey process) met with Oglala Sioux Tribe Acting THPO Kyle White and other representatives of the Oglala Sioux Tribe at the Tribal Historic Preservation Offices in Pine Ridge, South Dakota, to continue discussions regarding a methodology for the June tribal field survey.[54] On June 12, 2018, the Tribe presented Ms. Diaz-Toro and Dr. Nickens with a memorandum entitled "Discussion Draft — Cultural Resources Survey Methodologies" (June 2018 Proposal) that contained the following points:

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[50] LBP-18-5, 88 NRC at 112; *see also* Ex. NRC-176-R, Prefiled Direct Testimony of NRC Staff at 14-15 [hereinafter NRC Staff Direct Testimony]; CLI-19-9, 90 NRC at 128-29.

[51] *See, e.g.,* Tr. at 1389, 1395 (Apr. 6, 2018) (Oglala Sioux Tribe counsel explaining that concerns about contractor selection would not bar the Tribe's participation, and the "Tribe is comfortable" with the March 2018 Approach timeline). The Board described the responses of the parties to the March 2018 Approach in detail in LBP-18-5, 88 NRC at 110-13.

[52] *See* NRC-201, NRC's Timeline for March 2018 Approach.

[53] *See* Ex. BRD-010, Oglala Sioux Tribe June 8, 2018 E-Mail Response to NRC Staff June 8, 2018 E-Mail at PDF 2; Ex. NRC-200, NRC Staff July 2, 2018 Letter to the Oglala Sioux Tribe Regarding June 2018 Proposals at 1 [hereinafter NRC Staff July 2, 2018 Letter]; *see also* Ex. NRC-197, NON-PUBLIC — Oglala Sioux Tribe's June 12, 2018 Updated Cultural Resources Survey Methodologies Proposal [hereinafter Oglala Sioux Tribe Survey Methodology Proposal]; Ex. NRC-198, NON-PUBLIC — Oglala Sioux Tribe's June 15, 2018 Updated Cultural Resources Survey Methodologies Proposal [hereinafter Oglala Sioux Tribe Updated Survey Methodology Proposal].

[54] *See* LBP-18-5, 88 NRC at 119.

1. The June 2018 Proposal, which was addressed only to Ms. Diaz-Toro and Dr. Nickens, "shall not be disclosed or discussed with any federal employee or contractor not specifically addressed in this memo."
2. "[T]he prerequisites set out in [a June 8, 2018 memo circulated by Oglala Sioux Tribe counsel] must be satisfied before any cultural resource survey activities may take place that involve Lakota peoples or Lakota cultural, historical, or spiritual knowledge."
3. There would be other "preliminary work," not included in the proposal that has to be done during Phase One, and that would be based on an "analysis of publicly available information, and Powertech's proposed [siting] of it[s] facilities."
4. The involvement and remuneration of several dozen Oglala Sioux Tribe technical staff, spiritual leaders, elders, and warrior society leaders would be required.
5. Using the NRC Staff's contractor for specific aspects of the proposal would be required.
6. Visits and encampments by the Oglala Sioux Tribe elders at the Dewey-Burdock site over several days during the different seasons of the year would be required.
7. Reasoning that because "[10-meter (m)] intervals are required to obtain locations of [traditional cultural properties] which have been overlooked in past archaeological surveys" a 10-m transect-based Tribal cultural field survey of the entire Dewey-Burdock site would be necessary.
8. More than a year to complete the fieldwork associated with the Tribal cultural field survey and the oral history research and interviews would be needed.
9. By the Oglala Sioux Tribe's estimation, the "full budget to carry out the required survey" would exceed $2 million. This cost estimate for the June 2018 Proposal did not include (i.e., would be in addition to) the costs directly billable to Powertech for the NRC Staff's time and contractor support.
10. Accounting or making provision for the involvement of other Tribes would be necessary.[55]

[55] Ex. NRC-197, Oglala Sioux Tribe Survey Methodology Proposal at PDF 2-6. Although this exhibit was marked and has been maintained as non-public, this summary description of its provisions

(Continued)

On June 15, 2018, the Oglala Sioux Tribe provided the NRC Staff with the updated version of its June 12, 2018 proposal (Updated June 2018 Proposal).[56] The Tribe concluded in that updated proposal that:

> It is now NRC's task to either accept the [Oglala Sioux Tribe (OST)] proposal or to propose an approach that limits the OST-proposed survey methodology to meet what NRC considers a reasonable budget. We also understand that NRC will make the final decision on the type of survey that NRC carries out, and the OST requests the opportunity to review and consult on NRC's proposal before it is finalized.[57]

The NRC Staff responded by indicating it considered the Tribe's alternative survey methodology to be a constructive rejection of the March 2018 Approach and terminated implementation of the March 2018 Approach.[58] As a result, on August 17, 2018, the NRC Staff and the Oglala Sioux Tribe each moved for summary disposition seeking a determination that Contention 1A be resolved in its favor.[59]

In LBP-18-5, the Board denied both motions for summary disposition.[60] Although finding that the "Staff's March 2018 Approach, as agreed to by the parties, constituted a valid and reasonable approach for resolving Contention 1A,"[61] the Board also concluded that the NRC Staff failed to show there was no material factual dispute as to whether the NRC Staff had met its NEPA burden and fulfilled its duty to adequately address impacts to cultural resources at the Dewey-Burdock site.[62] The Board determined that although all parties agreed to the March 2018 Approach as a valid path for resolving Contention 1A, material factual disputes remained regarding the reasonableness of the NRC Staff's efforts to implement the March 2018 Approach.[63] These factual disputes con-

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was set forth in the NRC Staff's August 2018 dispositive motion and was reiterated by the Board in its October 2018 ruling on that motion, *see* LBP-18-5, 88 NRC at 120-21, without objection from the Oglala Sioux Tribe.

[56] Ex. NRC-198, Oglala Sioux Tribe Updated Methodology Proposal.

[57] *Id.* at 5. Again, this portion of the non-public updated methodology was set forth in both the NRC Staff's disposition motion and the Board's October 2018 decision, without Oglala Sioux Tribe objection. *See* LBP-18-5, 88 NRC at 121.

[58] Ex. NRC-200, NRC Staff July 2, 2018 Letter at 1-2; *see also* Ex. NRC-176-R, NRC Staff Direct Testimony at 17-18 (Diaz-Toro).

[59] NRC Staff's Motion for Summary Disposition of Contention 1A (Aug. 17, 2018) [hereinafter NRC Staff August 2018 Dispositive Motion]; Oglala Sioux Tribe's Motion for Summary Disposition (Aug. 17, 2018).

[60] LBP-18-5, 88 NRC at 100.

[61] *Id.*; *see* CLI-19-9, 90 NRC at 129.

[62] LBP-18-5, 88 NRC at 125.

[63] *Id.* at 130.

cerned (1) the reasonableness of the methodology proposed by the NRC Staff and its contractor for the site survey component of the March 2018 Approach; and (2) the propriety of the NRC Staff's unilateral decision to discontinue efforts to implement the March 2018 Approach during the first week of Phase One of the site survey.[64] Similarly, the Board concluded that the Oglala Sioux Tribe failed to show that there was no genuine issue of material fact as to the reasonableness of the NRC Staff's survey methodology or the NRC Staff's attempt to implement the March 2018 Approach.[65]

Given that summary disposition was not then appropriate on behalf of either party, in LBP-18-5, the Board provided the parties with two options to resolve Contention 1A: (1) the NRC Staff could resume the implementation of its March 2018 Approach, with appropriate adjustments to the dates in the original timetable; or (2) the parties could prepare for a prompt evidentiary hearing, where testimony and evidence would be taken on the factual questions that were raised but could not be resolved by the motions for summary disposition.[66] Regarding the first option, the Board specified that "the *only* aspect of the [March 2018] Approach that is open for discussion is the site survey methodology."[67] The Board specifically declared:

> [A]ny tribal negotiating position or proposal should only encompass the specific scientific method that would fit into the two-week periods set out in the March 2018 Approach for visiting the physical site, i.e., how the contractor and Tribe members will walk the site and mark or record located tribal resources. While we understand the need to be sensitive to the cultural tenets and needs of the Oglala Sioux Tribe, given that the time period for the site survey phases was agreed to by the Oglala Sioux Tribe, and that it is the Oglala Sioux Tribe that has continually pushed for a scientific methodology, negotiations and proposals must remain within these constraints.[68]

E. The NRC Staff's February 2019 Methodology

The NRC Staff elected to pursue the option of implementing the March 2018

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[64] *Id.* at 130-34. In finding that a material factual dispute existed on this question, the Board "acknowledge[d] that while the Oglala Sioux Tribe characterized the June 12 and June 15 proposals as proposals for a 'methodology,' those proposals may have been an attempt to renegotiate the entire approach, per the NRC Staff's interpretation." *Id.* at 132-33.

[65] *Id.* at 96, 130-31.

[66] *Id.* at 134-35.

[67] *Id.* at 135-36.

[68] *Id.*

Approach, with appropriate adjustments to the dates in the original timetable.[69] By letter dated November 21, 2018, the NRC Staff notified the Oglala Sioux Tribe, other Tribes, and the parties that it would resume carrying out the March 2018 Approach.[70] The NRC Staff letter stated:

> The NRC Staff remains committed to an open dialogue to finalize the methodology to be used for conducting the physical site survey to identify sites of historic, cultural, and religious significance to the Oglala Sioux Tribe and Lakota Sioux Tribes that could be affected by the Dewey-Burdock in situ uranium recovery (ISR) project.[71]

The letter included a revised timeline that contemplated conducting Phase One of the ground field survey in April 2019, followed by Phase Two in June 2019, and then completing the March 2018 Approach with the publication of a draft supplement to the FSEIS by December 2019 and a final FSEIS supplement by February 2020.[72] The Oglala Sioux Tribe's January 11, 2019 response to this letter raised concerns, among other things, about the lack of a cultural resources survey methodology description; the qualifications of Mr. Jerry Spangler, who had recently replaced Dr. Nickens in providing technical assistance as an NRC Staff contractor; the adequacy of a June 2018 literature review report compiled by Dr. Nickens; the compensation to be provided to tribal members participating in the field survey; the timeline for the survey; and the protection and ownership of confidential information.[73] The Board, meanwhile, monitored the parties' efforts to further implement the March 2018 Approach during subsequent telephone status conferences.[74]

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[69] Whether to pursue this option was, of course, a choice for the NRC Staff. A licensing board generally is not permitted to direct the work of the NRC Staff or to require it to adopt a specific approach to resolve an admitted contention. *See, e.g., Duke Energy Corp.* (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 74 (2004) ("Licensing boards do not sit to correct NRC Staff misdeeds or to supervise or direct NRC Staff regulatory reviews."); *Carolina Power and Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-80-12, 11 NRC 514, 516 (1980) (explaining that adjudicatory boards do not have authority to "direct the staff in performance of their administrative functions").

[70] *See* Ex. NRC-195, NRC November 21, 2018 Letter to Oglala Sioux Tribe Resuming Implementation of the NRC Staff March 16, 2018 Approach [hereinafter NRC Staff November 21, 2018 Letter].

[71] *Id.* at 1.

[72] *Id.* encl.

[73] Ex. NRC-203, Oglala Sioux Tribe's January 11, 2019 Response to NRC's November 21, 2018 Letter Proposing to Resume Negotiations at 1-6 [hereinafter Oglala Sioux Tribe January 11, 2019 Response].

[74] Tr. at 1460-1517 (Dec. 6, 2018); Tr. at 1518-54 (Jan. 29, 2019); Tr. at 1555-1627 (Mar. 21, 2019); Tr. at 1628-73 (Apr. 23, 2019).

The NRC Staff's efforts resulted in the development of a Proposed Draft Cultural Resources Site Survey Methodology (February 2019 Methodology).[75] The February 2019 Methodology, developed by NRC Staff contractor Jerry Spangler, incorporated the framework of other site survey methodologies.[76] On February 15, 2019, the NRC Staff provided this draft methodology to the Oglala Sioux Tribe for review,[77] and on February 19, 2019, the NRC Staff held a teleconference with the Oglala Sioux Tribe to discuss the contents of the proposed February 2019 Methodology.[78] On February 22, 2019, the NRC Staff met in-person at the Pine Ridge Reservation in South Dakota with the Oglala Sioux Tribal Historic Preservation Advisory Council and with THPOs from the Standing Rock, Rosebud, and Cheyenne River Sioux Tribes.[79] The purpose of the meeting was to continue developing the methodology, with the starting point being the proposed February 2019 Methodology.[80] During the meeting, however, the Tribes raised concerns and objections regarding the February 2019 Methodology, the March 2018 Approach as a whole, the NRC Staff's contractor selection, the NRC Staff's use of (or failure to use) a tribal liaison, and the existing PA.[81] The meeting ended with a request by Oglala Sioux Tribe counsel that the NRC Staff and its contractor "redraft the methodology, taking into consideration the Tribes' concerns and objections."[82]

Rather than redraft the 2019 Methodology, the NRC Staff sent a letter to the Tribes describing the design of the draft methodology and reemphasizing the limited scope of the March 2018 Approach that was still open for discussion after LBP-18-5.[83] The NRC Staff explained that the 2019 Methodology "was a working document intended to facilitate discussion with the Tribes" and that the

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[75] *See* Ex. NRC-214, February 2019 Methodology; *see also* Tr. at 1958-59 (Aug. 29, 2019) (Spangler).

[76] *See infra* section IV.A.5 & note 208.

[77] Ex. NRC-176-R, NRC Staff Direct Testimony at 20-21 (Diaz-Toro, Spangler).

[78] Tr. at 1563 (Mar. 21, 2019).

[79] Ex. NRC-176-R, NRC Staff Direct Testimony at 24, 25, 33 (Diaz-Toro, Spangler); *see also* Ex. NRC-218, Oglala Sioux Tribe's Summary of the Meeting with NRC Staff on February 22, 2019 in Pine Ridge, SD [hereinafter Oglala Sioux Tribe February 22, 2019 Meeting Summary].

[80] Ex. NRC-205, February 8, 2019 Teleconference Call Summary with Oglala Sioux Tribe Comments at 2-3.

[81] Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 2-3; *cf.* OST-042-R, Declaration of Kyle White at 14-15 (stating that "[t]he Tribe did not reject the draft methodology outright" but that "[s]ome participants expressed strong reservations about the draft methodology") [hereinafter White Declaration].

[82] Ex. NRC-215, NRC's March 1 Letter to Oglala Sioux Tribe - Negotiations Regarding Development of a Methodology for a Tribal Site Survey to Identify Historic, Cultural, and Religious Sites at 1.

[83] *See id.*

NRC Staff's goal "is to collaborate with the Tribes on the working document to elicit, encourage, and understand the Tribes' input in order to discuss and finalize a site survey methodology."[84] The NRC Staff concluded its letter by saying that while it would not "renegotiate the parameters of the March 2018 Approach" it "remains willing to further discuss the draft methodology" and asked the Oglala Sioux Tribe to confirm that it would be willing to continue on those terms.[85]

The Oglala Sioux Tribe replied on March 12, 2019.[86] Although indicating that "the Tribes remain committed to working with NRC Staff and its contractor to develop a suitable cultural resources survey methodology," the letter also stated that the "Oglala Sioux Tribe has never accepted a rigid application of the March 2018 proposal."[87] In its letter, the Oglala Sioux Tribe attempted to renegotiate the cost[88] and timeline[89] of the March 2018 Approach. The Tribe also raised NHPA issues that had previously been addressed and resolved in LBP-17-9.[90]

During a teleconference with the Board and the parties on March 21, 2019, the NRC Staff explained that the Oglala Sioux Tribe's March 12, 2019 letter led the NRC Staff to conclude "that the differences that remain were so fundamental that it was not feasible to have further negotiation meetings, particularly given that it was mid-March and the first survey effort was to take place in early April."[91] The NRC Staff advised that "we think the appropriate way to document this inability to reach an agreement would probably be on the record of an

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[84] *Id.* at 4.

[85] *Id.* at 5.

[86] *See* Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response to NRC's March 1, 2019 Letter [hereinafter Oglala Sioux Tribe March 12, 2019 Response].

[87] *Id.* at 1, 2.

[88] *Compare id.* at 2 ("[T]he Tribe did not unconditionally agree to any specific dollar amount. Rather, the Tribe unambiguously stated that the methodology required to meet NRC duties must be determined first, and only then could the costs be determined and agreed upon."), *with* Ex. NRC-194, Oglala Sioux Tribe's February 15, 2018 Responses at PDF 6 ("The Tribe believes that reimbursement is appropriate for its valuable staff time and resources. . . . The Tribe would anticipate that an amount on the order of what was proposed previously would be appropriate.") [hereinafter Oglala Sioux Tribe February 15, 2018 Responses].

[89] *Compare* Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 3 ("The Tribe has repeatedly reiterated the position that the timelines must be based on the methodology, and that it would be arbitrary and capricious to limit the methodology to timelines created without [the] benefit of a qualified contractor."), *with* Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response at 2 ("Lastly, the proposed time line presented by the NRC Staff appears achievable . . . .").

[90] *See* Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 4 ("The Tribe raises the NHPA issues because federal law requires compliance with its identification, evaluation, and nomination requirements.").

[91] Tr. at 1564-65 (Mar. 21, 2019).

evidentiary hearing."[92] The NRC Staff thus ceased further efforts to implement the March 2018 Approach and the February 2019 Methodology.

F. The 2019 Evidentiary Hearing

On April 3, 2019, the NRC Staff moved to set a schedule for an evidentiary hearing.[93] Powertech filed a response in support of the NRC Staff's motion, while the Oglala Sioux Tribe opposed the motion.[94] This Board granted the NRC Staff's motion and set a schedule that culminated in an August 2019 evidentiary hearing.[95] The NRC Staff submitted its initial position statement and the prefiled testimony of two witnesses on May 17, 2019.[96] Powertech filed its responsive position statement on May 22, 2019, without any supporting witness testimony.[97] The Oglala Sioux Tribe and Consolidated Intervenors filed responsive position statements on June 28, 2019,[98] accompanied by the prefiled testimony of three Oglala Sioux Tribe witnesses[99] and twenty-two affidavits submitted by Consolidated Intervenors.[100] The NRC Staff filed a reply statement of position on July 17, 2019, with accompanying prefiled reply testimony from its two witnesses.[101]

On August 3, 2019, the Oglala Sioux Tribe moved to strike the NRC Staff's

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[92] Tr. at 1619-20 (Mar. 21, 2019).

[93] [NRC Staff's] Motion to Set Schedule for Evidentiary Hearing (Apr. 3, 2019) [hereinafter NRC Staff's Motion to Set Evidentiary Hearing].

[94] Powertech (USA) Inc., Response to NRC Staff's Motion for Evidentiary Hearing (Apr. 17, 2019); Oglala Sioux Tribe's Response in Opposition to NRC Staff's Motion to Set Schedule for Evidentiary Hearing (Apr. 18, 2019) [hereinafter Oglala Sioux Tribe Evidentiary Hearing Response].

[95] Licensing Board Order (Granting NRC Staff Motion and Scheduling Evidentiary Hearing) (Apr. 29, 2019) (unpublished) [hereinafter Board Order Granting Evidentiary Hearing].

[96] NRC Staff's Initial Statement of Position on Contention 1A (May 17, 2019) [hereinafter NRC Staff Initial Statement]; Ex. NRC-176-R, NRC Staff Direct Testimony.

[97] Licensee Powertech (USA) Inc. Initial Statement of Position Regarding Contention 1A (May 22, 2019).

[98] Oglala Sioux Tribe's Response Statement of Position (June 28, 2019) [hereinafter Oglala Sioux Tribe Response Statement]; Consolidated Intervenors' Response Position Statement (June 28, 2019) [hereinafter Consolidated Intervenors Response Statement].

[99] Ex. OST-042-R, White Declaration; Ex. OST-043-R, Declaration of Dr. Kelly Morgan [hereinafter Morgan Declaration]; Ex. OST-045-R, Declaration of Dr. Craig Howe [hereinafter Howe Declaration].

[100] Ex. INT-023, Affidavits - Testimony Re: Oglala Lakota Cultural Resources (June 28, 2019) [hereinafter Affidavits].

[101] NRC Staff's Reply Statement of Position (July 17, 2019) [hereinafter NRC Staff Reply Statement]; Ex. NRC-225, NRC Staff's Reply Testimony [hereinafter NRC Staff Reply Testimony].

prefiled direct and reply testimony.[102] The Board denied the motion to strike on August 12, 2019.[103]

On August 28 and 29, 2019, the Board held an evidentiary hearing in Rapid City, South Dakota, concerning the issues of material fact identified in LBP-18-5.[104] At the hearing, the Board received statements from counsel, heard testimony from witnesses for the NRC Staff and the Oglala Sioux Tribe, and admitted party exhibits and thirteen Board-sponsored exhibits into the evidentiary record, with an exhibit list bound into the hearing transcript.[105] Subsequently, in a September 18, 2019 issuance, the Board adopted corrections to the hearing transcripts and to a redacted version of a closed session of the hearing conducted on the afternoon of August 29, 2019, and then closed the evidentiary record.[106]

On October 4, 2019, the NRC Staff, Powertech, and the Oglala Sioux Tribe submitted proposed findings of fact and conclusions of law.[107] On October 11, 2019, Powertech filed its reply.[108] On October 18, the Oglala Sioux Tribe and the NRC Staff filed reply findings of fact and conclusions of law.[109]

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[102] Oglala Sioux Tribe's Motion to Strike (Aug. 2, 2019).

[103] Licensing Board Order (Denying Oglala Sioux Tribe Motion to Strike) (Aug. 12, 2019) (unpublished) [hereinafter Board Order Denying Oglala Sioux Tribe Motion to Strike].

[104] *See* Atomic Safety and Licensing Board; In the Matter of Powertech USA, Inc.; Dewey-Burdock in Situ Uranium Recovery Facility, 84 Fed. Reg. 20,436 (May 9, 2019).

[105] *See* Licensing Board Memorandum and Order (Adopting Transcript Corrections and Redacted Version of Transcript for Closed Hearing Session and Closing the Evidentiary Record) (Sept. 18, 2019) at 2 (unpublished).

[106] *See id.* at 2-3.

[107] NRC Staff's Proposed Findings of Fact and Conclusions of Law (Oct. 4. 2019) [hereinafter NRC Staff Proposed Findings]; Powertech (USA) Inc.'s Proposed Findings of Fact and Conclusions of Law for Remaining Contention 1A (Oct. 4, 2019); Oglala Sioux Tribe's Proposed Findings of Fact and Conclusions of Law (Oct. 4, 2019) [hereinafter Oglala Sioux Tribe Proposed Findings]. Whether Consolidated Intervenors' failure to provide proposed findings is fatal to their ability to take an appeal from this Final Initial Decision will be a matter for Commission determination. *Compare Detroit Edison Co.* (Enrico Fermi Atomic Power Plant, Unit 2), ALAB-709, 17 NRC 17, 20-21 (1983) (in ruling on show cause order, explaining based on language of 10 C.F.R. § 2.754(b) (currently section 2.712(b) governing Part 2, Subpart G proceedings) that intervenor's failure to file proposed findings of fact does not constitute default so as to preclude seeking appeal unless presiding officer requires such findings to be submitted), *with* 10 C.F.R. § 2.1209 (in Part 2, Subpart L proceeding, each party "shall" file proposed findings).

[108] Powertech (USA), Inc's Reply to Proposed Reply Findings of Fact and Conclusions of Law for Remaining Contention 1A (Oct. 11, 2019).

[109] Oglala Sioux Tribe's Reply Findings of Fact and Conclusions of Law (Oct. 18, 2019); NRC Staff's Reply Findings of Fact and Conclusions of Law (Oct. 18, 2019) [hereinafter NRC Staff Reply Findings].

III. LEGAL STANDARDS

A. Legal Standards Under the Atomic Energy Act (AEA)

The AEA and the Uranium Mill Tailings Radiation Control Act of 1978[110] authorize the NRC to issue licenses for the possession and use of source material and AEA section 11e(2) byproduct material,[111] both of which are involved in the operation of an ISR uranium recovery facility. These statutes require the NRC to license ISR uranium recovery facilities that meet NRC regulatory requirements developed to protect public health and safety from radiological hazards. In order to operate, ISR uranium recovery facilities must meet NRC regulatory requirements and obtain a source materials license.

On April 8, 2014, acting pursuant to 10 C.F.R. § 2.1202(a), the NRC Staff issued NRC Source Materials License No. SUA-1600 to Powertech, authorizing Powertech to possess and use source and byproduct material in connection with the Dewey-Burdock project.[112] This license has since remained in place despite legal challenges.[113]

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[110] AEA, 42 U.S.C. §§ 2011 *et seq.*; Uranium Mill Tailings Radiation Control Act of 1978, 42 U.S.C. §§ 2022 *et seq.*; *id.* §§ 7901 *et seq.*

[111] Section 11e(2) byproduct material is regulated by the NRC under 10 C.F.R. Part 40. In 10 C.F.R. § 40.4, the NRC clarified the definition of byproduct material by adding the clause "including discrete surface wastes resulting from uranium solution extraction processes." In simpler terms, section 11e(2) byproduct material is the waste and tailings generated by the processing of ore for its uranium or thorium content.

[112] Ex. NRC-012, Powertech License; *see also* ADAMS Accession Package Number ML14043-A052, which includes the license transmittal letter, the license, and the NRC Staff's Final Safety Evaluation Report.

[113] The United States Court of Appeals for the District of Columbia Circuit upheld the Commission's ruling in CLI-16-20 that allowed the Powertech license to remain in effect while the proceeding and the NRC Staff's efforts to cure the NEPA-related deficiencies initially identified in LBP-15-16 continued before the Board. *Oglala Sioux Tribe v. NRC,* 896 F.3d 520, 527-38 (D.C. Cir. 2018). Although the D.C. Circuit panel found that the "irreparable harm" standard the Commission applied in determining whether to allow the Powertech license to become effective was contrary to NEPA, it nonetheless remanded to the Commission the question of whether to allow the Powertech license to remain in effect. *Id.* at 538. After briefing from the parties, the Commission left the license in place and ordered that if the adjudicatory proceeding regarding Contention 1A remained pending at the time Powertech contemplated beginning any activities under its license to construct and operate the Dewey-Burdock facility, Powertech must notify this Board and the parties no less than 60 days prior to commencing such activities. CLI-19-1, 89 NRC 1, 11 (2019).

B. Legal Standards Under the National Environmental Policy Act (NEPA)

Contention 1A raises challenges to the NRC Staff's compliance with NEPA[114] and with the NRC regulations implementing the agency's responsibilities pursuant to NEPA.[115] Congress enacted NEPA to protect and promote environmental quality, as well as to "preserve important historic, cultural, and natural aspects of our national heritage."[116] These goals are "realized through a set of 'action-forcing' procedures that require that agencies take a 'hard look' at environmental consequences"[117] and disseminate that information to the public. Any proposed agency action "significantly affecting the quality of the human environment" requires a detailed environmental impact statement (EIS).[118] Adverse effects include "ecological . . . aesthetic, historic, cultural, economic, social, or health" effects.[119] The Supreme Court has recognized that "one important ingredient of an EIS is the discussion of steps that can be taken to mitigate adverse environmental consequences."[120] Such a discussion is important to show that the agency has taken a "hard look."[121] Accordingly, the Council on Environmental Quality (CEQ) implementing regulations for NEPA indicate that an agency should discuss possible mitigation measures in defining the scope of the EIS,[122] in discussing alternatives to the proposed action and the consequences of that action,[123] and in explaining its ultimate decision.[124]

Additionally, the Commission's regulations require the NRC Staff's EIS to include "an analysis of significant problems and objections raised by . . . any affected Indian tribes and by other interested persons."[125] At the same time, NEPA does not "mandate particular results"[126] or require agencies to analyze every

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[114] 42 U.S.C. §§ 4321 *et seq.*

[115] 10 C.F.R. Part 51.

[116] 42 U.S.C. § 4331.

[117] *Robertson v. Methow Valley Citizens Council,* 490 U.S. 332, 350 (1989) (quoting *Kleppe v. Sierra Club,* 427 U.S. 390, 409 n.18 (1976)).

[118] 42 U.S.C. § 4332(C).

[119] 40 C.F.R. § 1508.8; *see also Oglala Sioux Tribe,* 896 F.3d at 530.

[120] *Robertson,* 490 U.S. at 351 (referencing Council on Environmental Quality regulations' definition of "mitigation").

[121] *Id.* at 352.

[122] 40 C.F.R. § 1508.25(b); *see* 10 C.F.R. Part 51, app. A, § 1(a)(7) (declaring standard format for agency EIS will include analysis of "mitigating actions").

[123] 40 C.F.R. §§ 1502.14(f), 1502.16(h).

[124] *Id.* § 1505.2(c).

[125] 10 C.F.R. § 51.71(b).

[126] *Robertson,* 490 U.S. at 350.

conceivable aspect of a proposed project.[127] NEPA thus gives agencies broad discretion to keep their inquiries within appropriate and manageable boundaries.[128] And in seeking to assess impacts, agencies are free to "select their own methodology so long as that methodology is reasonable."[129]

Finally, the NRC's case law establishes that a licensing board may look beyond the face of the NRC Staff's NEPA document and examine the entire administrative record to determine whether "the Staff's underlying review *was* sufficiently detailed to qualify as 'reasonable' and a 'hard look' under NEPA — even if the Staff's description of that review in the [NEPA document] was not."[130] Thus, "even if an [EIS] prepared by the Staff is found to be inadequate in certain respects, the Board's findings, as well as the adjudicatory record, 'become, in effect, part of the [EIS].'"[131]

C. Legal Standards for Incomplete and Unavailable Information in a NEPA Analysis

While a federal agency must analyze environmental consequences in its environmental review where it is reasonably possible to do so, NEPA's rule of reason acknowledges that in certain cases an agency may be unable to obtain information to support a complete analysis.[132] The CEQ regulations outline

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[127] *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

[128] *Ground Zero Ctr. for Non-Violent Action v. U.S. Navy,* 383 F.3d 1083, 1089-90 (9th Cir. 2004) (citing *No Gwen Alliance of Lane Cty., Inc. v. Aldridge,* 855 F.2d 1380, 1385 (9th Cir. 1988)); *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-09-7, 69 NRC 613, 631 (2009) (stating that the NRC Staff "need not address every impact that could possibly result, but rather only those that are reasonably foreseeable or have some likelihood of occurring").

[129] *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 316 (2010) (citing *Town of Winthrop v. FAA,* 535 F.3d 1, 11-13 (1st Cir. 2008)).

[130] *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 230 (2007).

[131] *Strata Energy, Inc.* (Ross In Situ Recovery Uranium Project), LBP-15-3, 81 NRC 65, 82 (2015), *aff'd,* CLI-16-13, 83 NRC 566 (2016) (citations omitted), *petition for review denied sub nom. Nat. Res. Def. Council v. NRC,* 879 F.3d 1202 (D.C. Cir. 2018); *see also Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 526 (2008) ("Consistent with longstanding NRC practice," an NRC adjudicatory decision "becomes part of the environmental [ROD] along with the environmental assessment itself.").

[132] National Environmental Policy Act Regulations; Incomplete or Unavailable Information, 51 Fed. Reg. 15,618, 15,621 (Apr. 25, 1986) [hereinafter CEQ Incomplete/Unavailable Information Regulations]; *cf. Methow Valley,* 490 U.S. at 333, 352-53 (holding that while analysis of environmental consequences is "an important ingredient of an EIS," NEPA does not impose a substantive duty on agencies to include a complete mitigation plan).

a mechanism for instances when an agency is unable to obtain complete information to fully assess foreseeable significant adverse effects on the human environment.[133] Section 1052.22 of the CEQ's regulations states that when the required information "is incomplete or unavailable . . . the agency shall always make clear that such information is lacking."[134] Furthermore, if the incomplete information is "essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant," the agency shall obtain the information and include it in the EIS.[135] If, on the other hand, the costs of obtaining the information are exorbitant, the agency must include in the FSEIS:

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.[136]

This standard provides a route for an agency to satisfy its NEPA obligation by disclosing and explaining its lack of information and providing a discussion of the potential impact to the best of its ability without the relevant information. But because "Congress did not enact [NEPA] to generate paperwork or impose rigid documentary specifications," federal courts "are unwilling to give a hyper-technical reading" of regulations like 40 C.F.R. § 1502.22 to require the inclusion of a separate, formal statement in the EIS to the effect that information is incomplete or unavailable where the record in the proceeding supplies the relevant information.[137]

The Commission's "longstanding policy is that the NRC, as an independent regulatory agency, 'is not bound by those portions of CEQ's NEPA regulations' that, like [40 C.F.R. §] 1502.22, 'have a substantive impact on the way in which the Commission performs its regulatory functions.'"[138] With respect to the applicability of 40 C.F.R. § 1502.22, the Commission has explained that it may

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[133] 40 C.F.R. § 1502.22.

[134] *Id.*

[135] *Id.* § 1502.22(a).

[136] *Id.* § 1502.22(b).

[137] *Colo. Envtl. Coal. v. Dombeck,* 185 F.3d 1162, 1172-73 (10th Cir. 1999).

[138] *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-11-11, 74 NRC 427, 444 & nn.94-95 (2011) (quoting Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9352 (Mar. 12, 1984)).

look to section 1502.22 for guidance, but it is not controlling.[139] In particular, reiterating that the NRC is not bound by section 1502.22, in the context of this proceeding the Commission recently emphasized that, relative to instances when there is an assertion that NEPA analysis information is "incomplete or unavailable," it has "consistently directed the Staff to undertake reasonable efforts to obtain unavailable information."[140] This observation is fully in line with the CEQ's explanation in the statement of consideration for the rule adopting section 1502.22 that this provision is intended to fulfill the goal of the "acquisition of [incomplete or unavailable] information if reasonably possible."[141]

D. Burden of Proof

Generally, an applicant has the burden of proof in a licensing proceeding. The statutory obligation of complying with NEPA, however, rests with the NRC.[142] Accordingly, for contentions asserting failure to comply with NEPA, the burden of proof is on the NRC Staff.[143] Because Contention 1A challenges the Staff's FSEIS, the NRC Staff bears the burden of proof for demonstrating that it has satisfied its responsibilities under NEPA.[144]

For the NRC Staff to prevail on the factual issues in this proceeding, the standard of proof that it must attain is preponderance of the evidence.[145] Generally, the factual showing supporting the NRC Staff's NEPA analysis is considered inadequate if the evidentiary record establishes that the Staff "has failed to take a 'hard look' at significant environmental questions — i.e., the Staff has unduly ignored or minimized pertinent environmental effects."[146]

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[139] *See* CLI-19-9, 90 NRC at 135; *Diablo Canyon,* CLI-11-11, 74 NRC at 443-44; *North Anna ESP,* CLI-07-27, 66 NRC at 235-36 & n.115; *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 12 (2008).

[140] CLI-19-9, 90 NRC at 135.

[141] CEQ Incomplete/Unavailable Information Regulations, 51 Fed. Reg. at 15,620.

[142] *See, e.g., Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983).

[143] 10 C.F.R. § 2.325.

[144] *See Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 34 (2010); *see also Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), CLI-07-17, 65 NRC 392, 395 (2007) (stating that "NRC hearings on NEPA issues focus entirely on the adequacy of the NRC Staff's work").

[145] *See Diablo Canyon,* CLI-08-26, 68 NRC at 521.

[146] *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 431 (2003).

IV. DISCUSSION

With Contention 1A, intervenors Oglala Sioux Tribe and Consolidated Intervenors have challenged the adequacy of the NRC Staff's FSEIS discussion of the impacts of the Dewey-Burdock facility on Tribal cultural resources. Following the Board's determination in LBP-15-16 that the existing FSEIS discussion failed to adequately identify and analyze cultural resources so as to provide mitigation measures sufficient to protect those resources from adverse effects resulting from the construction and operation of the Dewey-Burdock facility, the focus of the parties' efforts has been on developing and implementing a survey process to identify cultural resources and thereby provide the information necessary for the NRC Staff to correct the Board-identified FSEIS deficiency. The subject matter of the Board's August 2019 evidentiary hearing likewise concerned the adequacy of the NRC Staff's efforts in that regard. The NRC Staff and Powertech assert that the NRC Staff's attempts to develop a survey have been adequate under the circumstances to support a conclusion that the requisite "hard look" at impacts on Tribal cultural resources has been taken. In contrast, the intervenors declare that the NRC Staff still has not fulfilled its NEPA responsibilities because it failed, among other things, to create and implement a survey methodology that is adequate to gather the cultural resources information necessary to address the previously-recognized deficiencies in the NRC Staff's FSEIS.

In support of its position, at the evidentiary hearing the NRC Staff presented two witnesses: Ms. Diana Diaz-Toro, the project manager for the NRC Staff's environmental review of Powertech's Dewey-Burdock application,[147] and Mr. Jerry Spangler, an archaeologist and NRC Staff contractor.[148] The Oglala Sioux Tribe provided three witnesses: Mr. Kyle White, the director of the Oglala Sioux Tribe Natural Resources Regulatory Agency and former THPO;[149] Dr. Kelly Morgan, a cultural resources management (CRM) and traditional cultural properties (TCP) consultant;[150] and Dr. Craig Howe, director of the Center for American Indian Research and Native Studies.[151] Consolidated Intervenors did not offer a witness, but presented the affidavits of twenty-two individuals regarding "Oceti Saowin/Oglala Lakota" cultural resources.[152] Licensee Powertech did not provide any witness testimony.

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[147] Ex. NRC-177, Statement of Professional Qualifications of Diana Diaz-Toro.

[148] Ex. NRC-178, Statement of Professional Qualifications of Jerry Spangler [hereinafter Spangler CV].

[149] Ex. OST-042-R, White Declaration at 1.

[150] Ex. OST-044-R, Statement of Professional Qualifications of Dr. Kelly Morgan.

[151] Ex. OST-46-R, Statement of Professional Qualifications of Dr. Craig Howe.

[152] Ex. INT-023, Affidavits.

In the discussion below, we consider whether the NRC Staff's efforts to address the FSEIS deficiencies identified in LBP-15-16 are lacking or whether, in the current circumstances, the requisite "hard look" has been taken such that Contention 1A should be resolved in the NRC Staff's favor.

A. The NRC Staff's March 2018 Approach and February 2019 Methodology Were Reasonable

As is reflected in the discussion above, a principal disagreement between the parties is the adequacy of the NRC Staff's efforts, in light of the Board's ruling in LBP-17-9, to develop and implement a survey process that will provide the additional cultural resources information needed to permit the NRC Staff to fulfill its NEPA obligation. In considering this question, we begin with the issue of the sufficiency, i.e., reasonableness, of the two primary documents generated by the NRC Staff regarding the survey process: the March 2018 Approach and the February 2019 Methodology.

In the wake of the Board's ruling in LBP-17-9 that material factual issues identified in LBP-15-16 remained,[153] the NRC Staff's March 2018 Approach attempted to respond to the concerns raised by the Oglala Sioux Tribe in a May 2017 letter about the NRC Staff efforts to implement a survey process.[154] As we subsequently described in LBP-18-5, these efforts included (1) hiring a qualified contractor; (2) involving other Tribes; (3) providing iterative opportunities for a site survey; (4) engaging Tribal elders; and, most critically, (5) conducting a site survey using a scientific methodology in collaboration with the Tribes.[155] Here, we assess whether, based on the record of the August 2019 evidentiary hearing, the NRC Staff carried its burden to establish that the March 2018 Approach and its follow-up February 2019 Methodology were reasonable proposals for conducting the survey process.

1. Qualified Contractor

Since the NRC Staff undertook its efforts to address the FSEIS deficiency, the Oglala Sioux Tribe has repeatedly indicated that hiring a contractor "with the necessary experience, training, and cultural knowledge to carry out and facilitate the survey" is required to satisfy the NRC Staff's NEPA obligations.[156]

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[153] *See* LBP-17-16, 88 NRC at 196-98.

[154] Ex. NRC-176-R, NRC Staff Direct Testimony at 14 (Diaz-Toro); *see* Oglala Sioux Tribe May 31, 2017 Letter at 2, 4, 8; *see also* Ex. NRC-192, March 2018 Approach at 2-4.

[155] LBP-18-5, 88 NRC at 112-19.

[156] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 4. That being said, at least initially

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To support this request, the Oglala Sioux Tribe pointed out that Dr. Paul Nickens, who also served as the NRC Staff's cultural resources expert in the *Crow Butte License Renewal* case,[157] testified in that proceeding that in conducting a site survey to identify cultural resources, use of "a facilitator, something along the lines of a cultural anthropologist" who would "provide logistics support, documentation, recording support, [and] report preparation . . . [has] usually been the best approach."[158]

With the March 2018 Approach, the NRC Staff acted on the Oglala Sioux Tribe's request and "onboard[ed] a contractor to facilitate implementation of the approach."[159] The contractor would "facilitate the survey, and document findings and supporting information," and subsequently "prepare a survey report documenting the results and findings of the first and second phase of the field survey."[160] Additionally, the contractor would conduct oral history interviews with tribal elders.[161] Acting under an agency umbrella contract for procuring technical services,[162] the NRC Staff awarded a task order contract for technical support in implementing the March 2018 Approach to Sanford Cohen and Associates (SC&A).[163] Under the SC&A contract, Dr. Nickens began assisting

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following the NRC Staff's proffer of the March 2018 Approach, this did not seem to be the sharply contested issue that it subsequently became. During an April 6, 2018 teleconference, the Oglala Sioux Tribe explained to the Board that its concerns regarding contractor selection would not bar its participation. Tr. at 1389 (Apr. 6, 2018).

[157] *See Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-16-7, 83 NRC 340, 362 (2016), *appeal pending*.

[158] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 4 (quoting Transcript of Proceedings, *Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, Neb.), Docket No. 40-8943-OLA, Tr. at 2023 (ADAMS Accession No. ML15244B278) [hereinafter *Crow Butte* Tr.]).

[159] Ex. NRC-192, March 2018 Approach at 1.

[160] *Id.* at 2-3.

[161] *Id.* at 4.

[162] *See* Tr. at 1754-55 (Diaz-Toro); *see also* Ex. BRD-004, Excerpt from Enterprise Wide IDIQ Contract for Technical Assistance in Support of NRC Environmental and Reactor Programs.

[163] Tr. at 1764 (Aug. 28, 2019) (Diaz-Toro); Tr. at 2053, 2055 (Aug. 29, 2019) (Diaz-Toro); *see also* BRD-005, Enclosure 2 to NRC Staff January 25, 2019 Letter (NRC-204) in Response to Oglala Sioux Tribe January 11, 2019 Letter (NRC-203) [hereinafter January 25, 2019 Staff Letter, Encl. 2].

One of the Oglala Sioux Tribe's ongoing concerns has been tribal input into the retention of a qualified contractor. *See* Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response at 1-2; Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 1, 3; Ex. NRC-219, Oglala Sioux Tribe's March 30, 2018 Response to NRC Staff's March 16, 2018 Approach at 2 [hereinafter Oglala Sioux Tribe March 30, 2018 Response]. As the NRC Staff explained at the hearing, it chose to utilize an existing agency umbrella contract to obtain contractor technical assistance, which precluded utilizing any outside input regarding contractor selection. Tr. at 1730, 1732-37 (Aug. 28, 2019) (Diaz-Toro). We find this to be a reasonable approach given the expertise the NRC

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the NRC Staff with implementing the March 2018 Approach, but later in 2018 became unavailable for this task and was succeeded by Mr. Jerry Spangler, who had principal responsibility for developing the February 2019 Methodology.[164] The Oglala Sioux Tribe has questioned Mr. Spangler's qualifications and ability to carry out the Tribe-endorsed role of facilitator, asserting that the only way to satisfy the NEPA deficiencies is to hire the Tribe, a Tribe-preferred contractor, or another person (or other persons) affiliated with the Tribe.[165]

The record before us firmly establishes Mr. Spangler's bona fides for such a facilitator role. As outlined in his curriculum vitae, Mr. Spangler, who meets or exceeds the National Park Service professional qualification standards for archaeology and historic preservation,[166] has twenty-five plus years of experience in archaeological research and public outreach, working collaboratively with public and private entities to protect and preserve cultural resources in the Western United States and to foster greater public awareness of tribal interests, perspectives, and concerns.[167] Additionally, as he testified during the hearing, he has had significant involvement in creating the methodologies for establishing baseline inventories of cultural resources for the purpose of identifying and protecting such resources, the principal purpose of the additional cultural resources survey contemplated by the NRC Staff in its March 2018 Approach and February 2019 Methodology.[168]

We find, based on Mr. Spangler's curriculum vitae[169] and testimony at the

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Staff was seeking and the six to twelve months it generally would take to conduct a competition for a new services contract. Tr. at 1734, 1760-61, 1764 (Aug. 28, 2019) (Diaz-Toro).

[164] Tr. at 1765-67 (Aug. 28, 2019) (Spangler, Diaz-Toro); NRC-176-R, NRC Staff Direct Testimony at 21 (Diaz-Toro, Spangler).

[165] *See* Tr. at 1810-13 (Aug. 28, 2019) (White). As was the case with Dr. Nickens before him, *see* Oglala Sioux Tribe's Response in Opposition to NRC Staff's Motion for Summary Disposition of Contention 1A (Sept. 21, 2018) at 8 (opining that Dr. Nickens "possessed no demonstrated Lakota cultural experience"), the Oglala Sioux Tribe mainly criticizes Mr. Spangler because he is a non-Native archaeologist and therefore does not have the necessary knowledge of Lakota ways and mores. *See, e.g.,* OST-042-R, White Declaration at 5 ("Mr. Spangler lacks training, background, and knowledge of the distinctions between a 'Tribal member' and a 'Lakota person' . . . . Mr. Spangler's statement confirms a lack of knowledge of the distinctions and complexities involved [with cultural property identification], and causes unnecessary confusion."); Oglala Sioux Tribe Response Statement at 18 ("The inability of non-Native archeologists to integrate the various sources of knowledge and information are a familiar component of the Tribes' staff and contractors' day-to-day work with other federal agencies.").

[166] *See* Ex. NRC-178, Spangler CV at 4; *see also* Tr. at 1788-91 (Aug. 28, 2019) (Spangler).

[167] *See* Ex. NRC-178, Spangler CV at 4.

[168] *See* Tr. at 1773-75 (Aug. 29, 2019) (Spangler).

[169] *See* Ex. NRC-178, Spangler CV at 1-4.

hearing,[170] that he is well qualified to design a tribal cultural resources site survey methodology of the type contemplated by the NRC Staff in its March 2018 Approach and February 2019 Methodology. We find he possesses the necessary experience and training to craft a methodology that accounts for traditional cultural knowledge.[171] Mr. Spangler has served as a principal investigator in charge of numerous archaeological survey projects, worked with CRM firms in conducting such surveys, and has extensive experience assisting federal and state agencies in conducting cultural resource surveys.[172] We find that his three decades of experience developing cultural resource methodologies and extensive experience working with Native American tribes to facilitate protection of tribal interests demonstrate that he is well qualified to both design and implement the NRC Staff's methodology for undertaking the Dewey-Burdock cultural resources survey at issue.[173]

Moreover, the Oglala Sioux Tribe's generalized criticism of Mr. Spangler offers no support for the notion that he is not qualified for this role. The Oglala Sioux Tribe argues that the only way to satisfy the NEPA deficiencies identified by the Board is to hire the Tribe, a Tribe-preferred contractor, or another person (or persons) affiliated with the Tribe.[174] To be sure, having one or more individuals with Tribal knowledge about cultural resources that might be found on the Powertech site would be a critical component of the survey process in properly identifying/interpreting cultural resources for protection and preservation.[175] But that identification/interpretation role is not the same as the

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[170] *See* Ex. NRC-176-R, NRC Staff Direct Testimony, at 3, 21-22 (Spangler); Ex. NRC-225, NRC Staff Reply Testimony at 2-3 (Spangler); Tr. at 1777-81 (Aug. 28, 2019) (Spangler).

[171] *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 3 (Spangler); Ex. NRC-225, NRC Staff Reply Testimony at 2-3 (Spangler).

[172] Tr. at 1782, 1784-86 (Aug. 28, 2019) (Spangler).

[173] Mr. Spangler acknowledged that he is not among those few archaeological professionals who have attempted a pedestrian tribal cultural survey like that contemplated under the NRC Staff's 2018 Approach and 2019 Methodology, which he characterized as a relatively "new phenomenon in federal management and administrative proceedings . . . [with], as yet, no uniform standards or approaches, and therefore there is no federal guidance." Ex. NRC-176-R, NRC Staff Direct Testimony at 22 (Spangler). At the same time, the totality of his experience with both archaeological matters, including making technical recommendations on artifact eligibility for protection and tribal outreach, *see* Ex. NRC-178, Spangler CV at 4, convinces us that he was fully capable of performing the facilitator/administrative role contemplated by the NRC Staff in establishing a viable survey methodology and then implementing all aspects of that methodology, including the pedestrian survey, the associated interviews with tribal elders, and the preparation of a comprehensive impacts analysis to inform the NRC Staff's NEPA determination relative to Native American cultural resources on the Dewey-Burdock site.

[174] *See supra* note 156.

[175] *See* NRC Staff Direct Testimony at 15 (Diaz-Toro); NRC Staff Reply Testimony at 2 (Spangler); *see also* Ex. OST-043-R, Morgan Declaration at 3.

facilitator role that Mr. Spangler was to occupy, nor would the need for such tribal input as part of the survey process disqualify Mr. Spangler from fulfilling the facilitator role for which he was retained by the NRC Staff.[176]

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[176] Mr. Spangler himself recognized this distinction as he indicated that under the SC&A services contract with the NRC Staff he had contemplated retaining a Lakota specialist for additional assistance if the February 2019 Methodology had moved forward, which did not occur. *See* Tr. at 1884 (Aug. 28, 2019), 39-40 (Aug. 29, 2019 closed session) (Spangler).

In addition to Mr. Spangler's acknowledgment of the need to obtain tribal expertise to assist with identifying tribal cultural resources under the auspices of the SC&A contract, in response to Board questions regarding a footnote in the February 2019 Methodology-referenced Ball et al. study regarding methods for obtaining compensation for tribal survey activities, the NRC Staff acknowledged that other attempts were made to contract for such assistance in this proceeding. *See* Tr. at 1881-83 (Aug. 28, 2019) (Diaz-Toro) (citing Ex. NRC-184, Ball, David, et al., "A Guidance Document for Characterizing Tribal Cultural Landscapes," Outer Continental Shelf (OCS) Study BOEM 2015-047, Bureau of Ocean Energy Management (2015) at 12 n.7 [hereinafter Ball Study]); *see also* Tr. at 1758-59, 1763 (Aug. 28, 2019) (Diaz-Toro). Thus, starting in 2011 the Staff attempted to obtain such expertise by having Powertech and the tribes identify, and Powertech compensate, a CRM firm that, in conjunction with tribal representatives, would be able to conduct an appropriately informed site survey process. *See* Tr. at 1889-91 (Aug. 28, 2019), 1946-47 (Aug. 29, 2019), 14-15, 47-48 (Aug. 29, 2019 closed session) (Diaz-Toro). This resulted in three different proposals. *See* Ex. BRD-013, NRC Staff October 31, 2012 E-Mail to Tribal Historic Preservation Officers Forwarding October 31, 2012 NRC Staff Letter and Enclosed Revised Proposal for Dewey-Burdock Traditional Cultural Properties Study at 1; Ex. NRC-023, Powertech Dewey-Burdock Draft Scope of Work and Figures — Identification of Properties of Religious and Cultural Significance (Mar. 7, 2012) [hereinafter Powertech Scope of Work]; *see also* Ex. NRC-199-R, Makoche Wowapi/Mentz-Wilson Consultants, Proposal with Cost Estimate for Traditional Cultural Properties Survey for Proposed Dewey-Burdock Project (2012) (public redacted version of Ex. BRD-012); Ex. BRD-011, Kadrmas, Lee & Jackson, Inc., Scope and Fee for the U.S. Nuclear Regulatory Commission and Powertech (USA) (Oct. 2012) (non-public). All of these ventures were unsuccessful, *see* Tr. at 1946-47 (Aug. 29, 2019) (Diaz-Toro), as was a similar, contemporaneous attempt in the *Strata* ISR licensing proceeding, *see* Ex. BRD-003, Strata Energy, Inc., Ross ISR Project, NRC Docket #040-09091, Scope of Work for Assessment of Properties of Religious and Cultural Significance (Aug. 31, 2012), because of either tribal or applicant objections, *see* Tr. at 1946-47 (Aug. 29, 2019), 31-32 (Aug. 29, 2019 closed session) (Diaz-Toro); Ex. NRC-008-A-1, FSEIS, at 1-20 to -24; Ex. BRD-002, Excerpt from Environmental Impact Statement for the Ross ISR Project in Crook County, Wyoming, NUREG-1910, Supplement 5 (Feb. 2014) at 1-19 to -20.

Further, while acknowledging that within the past several years the agency has contracted for CRM services for cultural resources identification and evaluation in connection with the Strata ISR facility, *see infra* note 281, the Staff indicated that retaining either Oglala Sioux Tribe members or Quality Services, Inc., the CRM firm that the Oglala Sioux Tribe employed to assist the Tribe in this proceeding, *see infra* note 251, via an NRC contracting vehicle to prepare a methodology for conducting a site survey was not considered a viable option because of the concern that an AEA section 170A-prohibited conflict of interest would exist as a result of the Tribe's status as an intervenor in this proceeding. *See* Tr. at 1882, 1887-92 (Aug. 28, 2019). Given our determination that the factual circumstances here establish that NRC Staff acted reasonably in the context of the

(Continued)

2. *Involvement of Other Sioux Tribes*

The Oglala Sioux Tribe asserted in its May 2017 letter that "a cultural resources survey must include the other Lakota Sioux tribal governments . . . to be competent in its analysis of Lakota Sioux cultural resources."[177] The Oglala Sioux Tribe further maintained that being "engaged with and working with its other Sioux tribes" is a "central cultural tenet."[178] Therefore, in response to information provided by the Oglala Sioux Tribe, as part of the March 2018 Approach, the NRC Staff extended invitations to multiple Sioux tribes, most of whom did not take part in the prior April-May 2013 cultural resources survey during which seven tribes participated.[179] Besides the Oglala Sioux Tribe, the NRC Staff invited seven Sioux tribes to participate in the additional site survey, as well as other elements of the March 2018 Approach, such as the oral history interviews.[180] Only the Rosebud Sioux Tribe accepted the NRC Staff's invitation to join a June 5, 2018 webinar conference to discuss the survey methodology and participate in the March 2018 Approach.[181] Thereafter, at the February 22, 2019 meeting with the NRC Staff and its contractor Mr. Spangler at the Pine Ridge Reservation regarding the February 2019 Methodology, along with the Rosebud Sioux, only the Standing Rock and Cheyenne River Sioux Tribes were represented.[182]

Tribe's actions relative to the March 2018 Approach and the February 2019 Methodology, *see infra* sections IV.B-IV.C, both of which incorporated a Powertech-reliant compensation component, *see infra* note 231, we need not consider whether this contracting/compensation regime raises a question about the reasonableness of the NRC Staff's approach to carrying out its NEPA responsibility to identify and assess tribal cultural resource impacts at proposed facilities such as the Dewey-Burdock site. *See* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 5 (suggesting use of grant or cooperative agreement would allow tribal compensation to take place outside NRC Staff's continuing dispute with Powertech over full-cost recovery).

[177] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 4.

[178] Tr. at 1291 (Jan. 24, 2018).

[179] *See* Ex. NRC-192, March 2018 Approach at 2. Both the Santee Sioux and the Crow Creek Sioux Tribes participated in the 2013 site survey. *See* Ex. NRC-008-B-2, FSEIS at F-3.

[180] Via letters substantially the same as exhibit BRD-008, NRC Staff April 12, 2018 Letter to Crow Creek Sioux Tribe [hereinafter NRC April 12, 2018 Letter], the NRC Staff initially extended invitations to the Standing Rock Sioux Tribe, Rosebud Sioux Tribe, Cheyenne River Sioux Tribe, Yankton Sioux Tribe, Crow Creek Sioux Tribe, and Flandreau Sioux Tribe, LBP-18-5, 88 NRC at 113-14, followed by a subsequent invitation to the Lower Brule Sioux Tribe, *see* NRC Staff August 2018 Dispositive Motion at 20 n.91. As the NRC Staff noted in its April 2018 summary disposition motion, while the Yankton Sioux Tribe and the Crow Creek Sioux Tribe are Western Dakota Sioux tribes and the Flandreau Sioux Tribe is an Eastern Dakota Sioux tribe, the other tribes are Lakota Sioux tribes. *See id.* at 20 n.89.

[181] *See* LBP-18-5, 88 NRC at 114.

[182] Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 2.

The Board previously made clear that at this late stage of the process any invited tribe that failed to participate would have a hard time justifying its nonparticipation as a basis for questioning the adequacy of the survey process.[183] Likewise, the Oglala Sioux Tribe recognized that each tribe is "allowed their own decision on whether or not to be involved in the survey, or the NEPA process more generally."[184] Thus, given that the March 2018 Approach and the subsequent February 2019 Methodology afforded an opportunity for Sioux tribes other than the Oglala Sioux Tribe to become involved, the lack of willingness by other Sioux tribes to participate relative to either the March 2018 Approach or the February 2019 Methodology, as evidenced in the evidentiary record before the Board, does not render either of these approaches unreasonable.

3. Iterative Opportunities to Survey the Site

As part of a site survey methodology, the Oglala Sioux Tribe requested the opportunity to make multiple trips to the survey location,[185] and, as is explained in section II.D *supra,* the March 2018 Approach took this into account by providing a two-phased approach that allowed for opportunities to revisit the site.[186] Under the March 2018 Approach, Phase One of the survey was scheduled for June 11-22, 2018, and Phase Two was scheduled for September 3-14, 2018.[187] Citing problems settling on a methodology for the survey, the NRC Staff terminated Phase One of the field survey effort on June 15, 2018, halfway through the scheduled period, and Phase Two of the survey never started.[188] The February

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[183] *See* Tr. at 1408 (Apr. 6, 2018).

[184] Ex. NRC-194, Oglala Sioux Tribe February 15, 2018 Responses at PDF 5.

[185] Tr. at 1202 (Nov. 16, 2017) ("[T]he Tribe has always objected to one shot deals, to single visits that somehow bind them and has repeatedly suggested a process that includes a chance to go out into the field and have those boots on the ground, a chance to come back, talk amongst themselves, talk with their elders, go back again to address issues that come up during those talks, come back and iterate this a few times, not ad infinitum, but a few times."); *see also* Ex. 190, Oglala Sioux Tribe May 31, 2017 Letter at 4-6.

[186] Ex. NRC-192, March 2018 Approach at 2 ("Each phase will be two weeks in length. The first phase will be conducted in mid-June 2018 and the second phase will be conducted at the beginning of September 2018. This approach provides the greatest flexibility and broadest opportunity for tribal participation by providing Tribes time between each of the phases to discuss preliminary results and findings with their Tribal Leaders; an opportunity to revisit the site to examine different areas or re-examine previously-visited areas; and different dates to participate in the field survey if one of the phases conflicts with the Tribes' schedule.").

[187] Ex. OST-058, April 13, 2018 Enclosure 1 to Letter from NRC Staff to Oglala Sioux Tribe at 1 [hereinafter Timeline for March 2018 Approach].

[188] LBP-18-5, 88 NRC at 115; *see* Ex. NRC-200, NRC Staff July 2, 2018 Letter to the Oglala Sioux Tribe Regarding June 2018 Proposals at 1 [hereinafter NRC Staff Letter Discontinuing March 2018 Approach].

2019 Methodology retained this same two-phase approach,[189] but it was never implemented because the NRC Staff again terminated its participation in the process in March 2019.[190]

In mid-2018, a dispute arose and continued into early 2019 concerning the total time necessary to complete the survey process contemplated by the March 2018 Approach and February 2019 Methodology, in light of the Oglala Sioux Tribe's alternate methodology proposal.[191] Nonetheless, this dispute about the time necessary to complete the survey does not negate the reasonableness of the NRC Staff's basic approach of seeking to create separate opportunities for tribal visits to the Powertech site. This approach permits later visits to be informed by information gathered during previous site visits, as well as providing flexibility for tribal representatives who might have an availability conflict.

4. Involvement of the Tribal Elders

The Oglala Sioux Tribe's May 2017 letter asserted that the "ability to use tribal elders" was one of the "cultural needs of the Lakota Sioux" that should be accounted for in crafting a reasonable approach to satisfy the NRC Staff's NEPA obligation.[192] The Oglala Sioux Tribe emphasized Dr. Paul Nickens' endorsement of the need to involve Tribal elders in any approach, having previously testified that "probably the best TCP survey approach is to involve Tribal Elders."[193]

Both the March 2018 Approach and the February 2019 Methodology incorporated Tribal elder involvement. And relative to both, the Oglala Sioux Tribe approved of the "commitment as set forth in [the NRC Staff's] proposal to engage both the Tribal elders and the Tribal councils of multiple Tribes" as "appropriate and welcome."[194]

Under the March 2018 Approach, after the first phase of the site survey, the NRC Staff's contractor would conduct "oral history interviews with the

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[189] Ex. NRC-214, February 2019 Methodology at 14-17.

[190] *See supra* notes 91-92.

[191] During an April 2018 teleconference, counsel for the Oglala Sioux Tribe indicated to the Board that the "Tribe is comfortable" with the March 2018 Approach timeline. Tr. at 1395 (Apr. 6, 2018). Subsequently, however, a disagreement arose that we describe in more detail in section IV.C *infra* and conclude was one of the factors that led the NRC Staff to the reasonable determination that the cultural resources information it needs to complete the FSEIS cultural resources supplement is unavailable.

[192] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 8.

[193] *Id.* at 4 (quoting *Crow Butte* Tr. at 2023).

[194] Ex. NRC-193, Oglala Sioux Tribe January 19, 2019 Letter at 2.

Tribal Elders of the Lakota Sioux Tribes."[195] These interviews were to focus "on gathering information about resources of significance to the Lakota Sioux Tribes that could be impacted by the Dewey-Burdock ISR project."[196] Additionally, as discussed in section IV.A.3 *supra,* the March 2018 Approach provided for iterative opportunities to visit the survey location to allow for the Oglala Sioux Tribe (and other Sioux tribes, if they desired) to consult with Tribal elders after Phase One of the site survey.

In between Phase One and Phase Two of the field surveys, interviews with Tribal elders were scheduled to occur from August 6 to August 17, 2018.[197] These two weeks were also intended to be an "opportunity for the Tribes and NRC staff to discuss preliminary results of the first part of the site survey."[198] A similar period of time was allotted under the February 2019 Methodology as well.[199] Yet, the NRC Staff never reached this element in either instance because the Oglala Sioux Tribe's June 2018 proposals would have significantly increased the time and resources associated with implementing this aspect of the survey process.[200] But even though neither methodology was implemented, we still find reasonable the NRC Staff's decision to provide an opportunity for Tribal elder input into the identification and interpretation of cultural resources on the Powertech site as an essential element of the NRC Staff's approach.

5. A Scientific Site Survey Methodology

In LBP-18-5, the Board concluded that there was still a material factual dispute as to the reasonableness of the NRC Staff's site survey methodology.[201] The Board explained that the major impediment to resolving Contention 1A was the NRC Staff's repeated offering of an "open-site" survey approach as the methodology for completing the physical survey of the Dewey-Burdock site.[202] An open-site survey, as that term was used and described by counsel for the Oglala Sioux Tribe, is a survey that involves "no support from NRC staff or contractor. And it is essentially opening the site to the tribes to go out and do what they will do and be totally responsible for providing all the data and the analysis with no set protocol or methodology."[203] The Oglala Sioux

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[195] Ex. NRC-192, March 2018 Approach at 4.
[196] *Id.*
[197] Ex. OST-058, Timeline for March 2018 Approach at 1.
[198] Ex. NRC-192, March 2018 Approach at 4.
[199] Ex. NRC-214, February 2019 Methodology at 16.
[200] *See supra* sections II.D, II.E; *infra* section IV.C.
[201] LBP-18-5, 88 NRC at 130-31.
[202] *Id.* at 116-17.
[203] Tr. at 1431 (Apr. 6, 2018).

Tribe rejected an open-site methodology at least twice before the March 2018 Approach was proffered by the NRC Staff.[204] In a 2016 meeting, the Oglala Sioux Tribe made clear its position that such an open site "survey methodology lack[s] scientific integrity."[205] In its May 2017 letter rejecting the "open-site" survey for the second time, the Tribe detailed what it considered appropriate aspects of a survey, including specific protocols and methodologies that the Tribe expected would be included in any NRC Staff courses of action to remedy the cultural resources deficiencies in the FSEIS.[206]

In LBP-18-5, we acknowledged the importance of selecting a scientific methodology for the site survey.[207] Given the Oglala Sioux Tribe's repeated requests for a scientific methodology, we find that the NRC Staff appropriately balanced the incorporation of tribal input with the scientific method. The NRC Staff's February 2019 Methodology builds upon the framework of other scientific methodologies that have been successfully used for site surveys by other governmental agencies.[208] Thus, the NRC Staff's February 2019 Methodology utilizes the definitions and field identifications of Dr. Sebastian LeBeau's Lakota-specific work,[209] which the Oglala Sioux Tribe expressly requested be

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[204] *See* Ex. NRC-186, Summary of May 19, 2016 Meeting with the Oglala Sioux Tribe at 2; Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 1; Tr. at 1431 (Apr. 6, 2018).

[205] Ex. NRC-186, Summary of May 19, 2016 Meeting with the Oglala Sioux Tribe at 2.

[206] *See* Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 4-6.

[207] *See* LBP-18-5, 88 NRC at 135 (holding that "any tribal negotiating position or proposal should only encompass the specific *scientific method* that would fit into the two-week periods set out in the March 2018 Approach" (emphasis added)); *see also* CLI-19-9, 90 NRC at 130.

[208] *See* Tr. at 1960 (Aug. 29, 2019) (Spangler) (explaining that the LeBeau methodology utilized for the February 2019 Methodology has been used by the Army Corps of Engineers, and Ball et al., has been used by the Department of Interior). The February 2019 Methodology lists as an appendix six other cultural resource survey methodologies that were reviewed by NRC Staff contractor Jerry Spangler. *See* Ex. NRC-214, February 2019 Methodology at A-1 to -2 (listing alternative approaches such as the North Dakota Department of Transportation (NDDT) approach, the Southern Nevada model, the Stoffle method, the Solomon Islands model, the Cultural Values model, and the Twin Cities model); *see also* Ex. NRC-180, Branam, Kelly M., et al., "Survey to Identify and Evaluate Indian Sacred Sites and Traditional Cultural Properties in the Twin Cities Metropolitan Area" (August 2010); Ex. NRC-181, Stoffle, Richard W., et al., "The Land Still Speaks: Traditional Cultural Property Eligibility Statements for Gold Strike Canyon, Nevada and Sugarloaf Mountain, Arizona" (2000); Ex. NRC-182, Toupal, Rebecca S., et al., *Cultural Landscapes and Ethnographic Cartographies: Scandinavian-American and American Indian Knowledge of the Land,* Envtl. Sci. & Pol'y 4:171-184 (August 2001); Ex. NRC-183, NDDT, "Design Manual," Chapter II, "Environmental and Public Involvement," Section 5, "Cultural Resources," Revised March 6, 2017 [hereinafter NDDT Design Manual]; Ex. NRC-184, Ball Study; Ex. NRC-185, Odess, Daniel, "A Landscape-Scale Approach to Mitigating Adverse Effects on Historic Properties," U.S. Department of the Interior Draft Document, June 6, 2016.

[209] Ex. NRC-214, February 2019 Methodology at 4, 6, 8-10, 12, tbls. 1-2; *see* Ex. NRC-176-R,

(Continued)

given consideration by the NRC Staff,[210] but then subsequently criticized when it was incorporated.[211] NRC Staff contractor Jerry Spangler also incorporated into that proposal the 2015 framework of Ball et al., which emphasizes that a survey methodology should be driven by tribal goals and objectives and that tribal members themselves describe the sites and their significance according to their own standards and definitions.[212] In blending these previously successful methodologies, the NRC Staff's February 2019 Methodology suggested general categories of information to be collected and analyzed, a format for recording data and observations, and ways to describe the observations.[213] It also proposed

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NRC Staff Direct Testimony at 23 (Diaz-Toro, Spangler) (explaining that Mr. Spangler "blended the definitions and field identifications found in a Lakota-specific methodology from Dr. LeBeau, who is a member of the Cheyenne River Sioux Tribe"); *see also* Ex. NRC-206, LeBeau, Sebastian, "Reconstructing Lakota Ritual in the Landscape: The Identification and Typing System for Traditional Cultural Property Sites" at 1 (2009) ("This work is about Lakota [TCP sites] and the development of a Lakota survey methodology and site taxonomy system . . . .") [hereinafter LeBeau Report].

[210] Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 3.

[211] *See* Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 3 ("Heavy reliance on LeBeau methodology is problematic. LeBeau's work and methods are controversial, do not enjoy their Tribal Historic Preservation Officers' support, and it should not be used as the primary basis for a methodology."); Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 6 ("At the February 22, 2019 meeting, the Tribes communicated that heavy reliance in the February 15, 2019 Draft Methodology document on LeBeau's model is not appropriate and ignores criticisms of Mr. LeBeau's 2009 dissertation.").

Although the criticisms lodged in these two documents are general at best, during the evidentiary hearing Dr. Morgan explained in more detail the tribal concerns about Dr. LeBeau's approach. She indicated that tribal criticism of this decade-old dissertation has been that he both generalizes too much in his descriptions of cultural resources without having gotten sufficient input from the tribal community while at the same time being too particular by disclosing information that elders and other tribal members would consider inappropriate for public dissemination. *See* Tr. at 1855-60 (Aug. 28, 2019) (Morgan). She recommended instead more reliance on guidance from the NDDT, which she indicated is referenced but not accounted for sufficiently in the February 2019 Methodology, because that guidance is more reflective of the recent work that has been done by building relationships with tribal nations to better reflect their perspective on the identification of cultural resources. *See* Tr. at 1860-63 (Aug. 28, 2019) (Morgan) (citing Ex. NRC-183, NDDT Design Manual). While it may be that further development of the February 2019 Methodology would have benefited from additional incorporation of the NDDT guidance document as well as specific tribal input on issues with Dr. LeBeau's work, this is hardly sufficient to support the conclusion that the February 2019 Methodology's reliance on Dr. LeBeau's work to provide a general analytical framework for the site survey process was unreasonable, particularly given, as Mr. Spangler pointed out, *see* Tr. at 1866 (Aug. 28, 2019) (Spangler), that report's usefulness in providing a structural approach to eliciting information in a way that will assist a non-tribal decision maker in understanding the information and its importance.

[212] *See* Tr. at 1960 (Aug. 29, 2019) (Spangler); Ex. NRC-176-R, NRC Staff Direct Testimony at 7-8 (Spangler), 32-33 (Diaz-Toro, Spangler); *see also* Ex. NRC-184, Ball Study at 2-3.

[213] Ex. NRC-214, February 2019 Methodology at 10-12; *see* Ex. NRC-176-R, NRC Staff Direct Testimony at 28 (Diaz-Toro, Spangler).

using geographic information system (GIS) software to document the location of sites of significance, oral interviews to supplement field observations, and a set of prescriptive steps to accomplish the site survey within the parameters of the March 2018 Approach, culminating in a synthesized report.[214]

These aspects of the February 2019 Methodology demonstrate that, in response to the Oglala Sioux Tribe's previous criticisms of site surveys as lacking "scientific integrity," the NRC Staff developed a survey proposal that would describe the observable characteristics of sites of tribal significance in a sound manner by blending the scientific method with tribal cultural knowledge.[215] We thus find the NRC Staff's March 2018 Approach, as expanded upon in the February 2019 Methodology, to be valid from both a scientific and cultural resources perspective as a reasonable approach to conducting the site survey recognized by all as critical to resolving Contention 1A.

B. Because of Oglala Sioux Tribe Noncooperation, the Information Necessary for the NRC Staff to Perform a NEPA Analysis of Potential Impacts on the Oglala Sioux Tribe Is Unavailable

In LBP-15-16, the Board observed that "[t]o fulfill the agency's NEPA . . . responsibilities to protect and preserve cultural, religious, and historical sites important to the Native American tribal cultures in the Powertech project area, the NRC Staff must conduct a study or survey of tribal cultural resources before granting a license."[216] Based on the record before us, we have determined that the basic parameters established for that survey by the March 2018 Approach and the February 2019 Methodology were reasonable efforts to design a survey that could provide the cultural resources information necessary to address the NEPA

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[214] Ex. NRC-214, February 2019 Methodology at 12-14; *see* Ex. NRC-176-R, NRC Staff Direct Testimony at 27-28.

[215] *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 30-31; *see also* Ex. NRC-206, LeBeau Report at 90-91. NRC Staff witnesses Ms. Diaz-Toro and Mr. Spangler acknowledged that there is an inherent conflict between the scientific method, which is based on evidence that is observable and measurable, and a tribal assessment of a cultural property, which is based in significant part on unobservable characteristics of a site, depending in large part on recognition by tribal members of the nature and significance of a site as a place of cultural or spiritual significance. *See* NRC-176-R, NRC Staff Direct Testimony at 30-31 (Diaz-Toro, Spangler). In an attempt to reconcile these two perspectives, with the February 2019 Methodology, the NRC Staff sought to establish a mechanism that would allow for scientifically sound empirical observations, while supplementing this information with observations from tribal perspectives that might not be considered rigidly "scientific," but would be given appropriate consideration because they would be based upon traditional knowledge that could only be provided by members of the Oglala Sioux Tribe. *See id.* at 31-33 (Diaz-Toro, Spangler).

[216] LBP-15-16, 81 NRC at 653.

deficiency. But that is not the end of our inquiry. The NRC Staff maintains that, despite these reasonable efforts, it was unable to obtain sufficient information and so should be excused from supplementing the cultural resources analysis in its FSEIS. Accordingly, we now consider the extent to which cultural resources information necessary to permit the NRC Staff to fulfill its NEPA responsibilities is unavailable to the NRC Staff because the survey has not been conducted as a result of the Oglala Sioux Tribe's unwillingness or unjustifiable failure to collaborate with the NRC Staff in implementing the March 2018 Approach and the February 2019 Methodology.[217]

In a letter from former Oglala Sioux Tribe THPO Trina Lone Hill to the NRC Staff on January 19, 2018, regarding an initial iteration of what would become the March 2018 Approach, Ms. Lone Hill stated: "Lastly, the proposed time line presented by NRC Staff appears achievable . . . ."[218] Both that proposal and the March 2018 Approach proposed timeline contemplated two two-week survey sessions as well as oral interviews with tribal elders.[219] Similarly, one month later the Oglala Sioux Tribe expressed satisfaction with the compensation package outlined in the March 2018 Approach: "The Tribe believes that reimbursement is appropriate for its valuable staff time and resources. . . . The Tribe would anticipate that an amount on the order of what was proposed previously would be appropriate."[220] The amount "proposed previously" was $10,000 per participating Tribe plus per diem and mileage.[221] At the evidentiary hearing, however, Oglala Sioux Tribe witness Kyle White testified that when he took over as THPO early in 2018 after Ms. Lone Hill left, he decided that he "did not feel comfortable with what was agreed to by the previous THPO."[222] Mr. White,

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[217] An example of the Oglala Sioux Tribe's unwillingness or unjustifiable failure to support the NRC Staff's efforts is the Tribe's insistence that modifications are necessary to the confidentiality agreement in this case before any field work or interviews can happen. *See, e.g.,* Ex. NRC-208, June 8, 2018 Letter from Travis Stills, Oglala Sioux Tribe, to the NRC Staff, Proposed Schedule for Cultural Resources Survey (insisting that updated confidentiality agreements are "prerequisites for going into the field"). However, at the August 2019 evidentiary hearing, Oglala Sioux Tribe witness Kyle White testified that "we thought [confidentiality agreements] could come at a later date before the interviews took place." Tr. at 44 (Aug. 29, 2019 closed session) (White); *see* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 5-6. For its part, the NRC Staff sent suggested language for a confidentiality agreement to the Tribe in 2018 but never received a reply. *See* Tr. at 1922-23 (Aug. 28, 2019), 46 (Aug. 29, 2019 closed session) (Diaz-Toro); *see also* Ex. BRD-009, NRC Staff December 12, 2018 E-Mail Response to Oglala Sioux Tribe December 10, 2018 E-Mail at 1.

[218] Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response at 2.

[219] *See* Ex. NRC-191, NRC Staff December 6, 2017 Letter at 2; Ex. OST-058, April 13, 2018 Enclosure 1 to Letter from NRC Staff to Oglala Sioux Tribe at PDF 2.

[220] Ex. NRC-194, Oglala Sioux Tribe February 19, 2018 Responses at PDF 6.

[221] *See infra* note 231; LBP-18-5, 88 NRC at 111 & n.101.

[222] Tr. at 1975 (Aug. 29, 2019) (White).

in collaboration with tribal contractor Quality Services, Inc., and other senior members of the Tribe,[223] then developed the Oglala Sioux Tribe's June 2018 proposals, which contemplated a site survey lasting at least one year (with site visits during each of the four seasons) followed by oral interviews.[224] In addition, the Oglala Sioux Tribe's June 2018 proposals advocated for the expenditure of sums that were many multiples of the previously proposed survey reimbursement figures outlined above, with an estimate of $2 million to implement the March 2018 Approach in toto.[225] Moreover, when the NRC Staff sought to engage the Oglala Sioux Tribe in discussions over the essential elements of the February 2019 Methodology, the Tribe instead insisted on returning to the concerns that had been raised in its June 2018 proposals.[226]

This Board has acknowledged in previous rulings that the Oglala Sioux Tribe's June 2018 Proposals during this proceeding involved expanding time-frames and exorbitant costs.[227] In contrast to the apparent initial acceptance of the basic parameters of the March 2018 Approach when it was first proposed,[228] the Tribe now takes a contrary position. At the hearing, Dr. Morgan stated that "the [March 2018 Approach] is wholly lacking in many respects," implying that the NRC Staff would need to start over completely with its site survey methodology.[229] At the same time, there is uncertainty even among people affiliated with the Tribe as to what would be needed to ensure Tribal involvement and support for the March 2018 Approach and the February 2019 Methodology. At the August 2019 evidentiary hearing, Oglala Sioux Tribe witness Dr. Morgan stated her opinion that a "reasonable [cost] estimate" for designing and implementing a survey and reporting process that she would consider adequate to meet the NRC Staff's NEPA obligation would be "between that $800,000

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[223] *See infra* note 251; Ex. OST-42-R, White Declaration at 13.

[224] *See* Ex. NRC-197, Oglala Sioux Tribe Survey Methodology Proposal at PDF 4; NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 3; Tr. at 1966, 1969 (Aug. 29, 2019) (White).

[225] *See* Ex. NRC-197, Oglala Sioux Tribe Survey Methodology Proposal at PDF 6; NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 6.

[226] *See* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 2-3, 4-6; Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 1-2; Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 2-7; *see also infra* note 234.

[227] In LBP-15-16, 81 NRC at 657 n.229, the Board found that the cost of the Oglala Sioux Tribe's 2012 Makoche Wowapi survey proposal, estimated at close to $1 million, Tr. at 807 (Aug. 19, 2014), was unreasonable. In LBP-18-5, 88 NRC at 132-33, the Board indicated that the Oglala Sioux Tribe's June 2018 proposals "went far beyond just suggesting a methodology for the site survey . . . by expanding the budget, the time frame, and the geographic area involved."

[228] *See supra* notes 156 (hiring contractor), 218 (timeline), 220 (reimbursement).

[229] Tr. at 1953 (Aug. 29, 2019) (Morgan) ("And I would hate to say that you need to start all over, but you don't have a document that's been fully fleshed out.").

mark and a one million dollar mark."[230] While this estimate is still considerably higher than the proposed reimbursement for the Tribe's participation under the March 2018 Approach or the February 2019 methodology,[231] it is significantly lower than the Oglala Sioux Tribe's June 2018 cost estimate for survey work, the amount of compensation that continued to be an issue relative to the NRC Staff's February 2019 Methodology.[232]

In LBP-18-5 we concluded that "all the parties accepted the March 2018 Approach as reasonable, and the NRC Staff began to move forward with its implementation [in 2018], in accordance with the parties' expressions of support for the March 2018 Approach and its included timeline."[233] Rather than work with the NRC Staff to incorporate into a site survey methodology any reasonable requirements that the Oglala Sioux Tribe believed to be missing from the discussion drafts, the record indicates the Tribe remains committed

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[230] Tr. at 8-9 (Aug. 29, 2019 closed session) (Morgan).

[231] *See* Ex. NRC-210, April 11, 2018 Powertech Response to NRC Staff's March 16, 2018 Letter Confirming Reimbursement and Honoraria at PDF 3 (confirming per diem offer relative to March 2018 Approach of $136 per day for lodging and $59 per day for meals and incidental expenses for each tribal representative, $0.535 per mile round trip to Edgemont, South Dakota, for each field survey phase for up to two vehicles for each Lakota Sioux Tribe, and $10,000 honorarium for each Lakota Sioux Tribe to be used at Tribe's discretion); Ex. NRC-202, Powertech's December 5, 2018 Response to NRC Staff's November 21, 2018 Letter Confirming Reimbursement and Honoraria at PDF 2 (confirming Powertech will continue to provide reimbursement and support for field survey relative to what became NRC Staff's February 2019 Proposal).

Survey participation compensation consisting of some combination of a $10,000 per tribe honorarium along with per diem and travel mileage reimbursement for each individual tribal participant has been the reimbursement offer in this and other recent ISR licensing proceedings. *See supra* note 221 and accompanying text; *Crow Butte License Renewal,* LBP-16-7, 83 NRC at 397; *see also* Ex. BRD-003, Strata Energy, Inc., Ross ISR Project, NRC Docket #040-09091, Scope of Work for Assessment of Properties of Religious and Cultural Significance (Aug. 31, 2012) at 1-20 to -21. As noted above, *see supra* note 220, that reimbursement offer had a favorable reception in this proceeding. It could be a viable option as well in instances when tribal involvement is limited in scope and/or participation in terms of the number of survey days and tribal members involved. On the other hand, when viewed in light of the estimated minimum rates for compensating CRM firm personnel doing field surveys, *see* Tr. at 32-33 (Aug. 29, 2019 closed session) (using as bounding figures South Dakota minimum wage rate and estimated area CRM hourly field technician wage rate, approximate cost of covering Powertech 2600-acre APE within four-week period contemplated by NRC Staff field survey plan between $13,000 and $30,000), to say nothing of the possible cost of compensating tribal oral interview participants, *see* Tr. at 1909, 1912-13 (Aug. 28, 2019), 37 (Aug. 29, 2019 closed session) (Morgan) (indicating "customary" to compensate oral interview participants); *but see* Tr. at 908, 1912 (Aug. 28, 2019) (Spangler) (indicating "never heard" of compensating oral interview participants), in ISR proceedings with different factual circumstances than existed here, the reasonableness of such a one-size-fits-all approach to tribal compensation may be an open question.

[232] *See* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 4-5.

[233] LBP-18-5, 88 NRC at 111-12; *see* CLI-19-9, 90 NRC at 128.

to the much higher costs and far more extensive survey time contained in its June 2018 proposals.[234] The Tribe's alternative is fundamentally incompatible with implementation of the March 2018 Approach and the subsequent February 2019 Methodology.[235] The Oglala Sioux Tribe's June 2018 proposals included a wide range of activities and milestones that were not part of the March 2018 Approach generally endorsed by all the parties, entailing a significantly larger scope, cost, and implementation time than the NRC Staff's selected approach.[236]

As the NRC Staff has recognized, without the realistic prospect of an agreement with the Oglala Sioux Tribe to conduct a pedestrian site survey, the oral interviews with tribal elders, and the other aspects of the NRC Staff's March 2018 and follow-on February 2019 efforts to provide for a survey process, the information needed to complete a supplement to the FSEIS so as to address the Board's concerns in LBP-15-16 would not otherwise be obtainable.[237] Given

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[234] While, perhaps because of confidentiality concerns, the cost estimates and other particulars of the June 2018 proposals that caused the NRC Staff to cease its efforts regarding the March 2018 Approach were not reiterated by the Oglala Sioux Tribe in its responses to the NRC Staff's February 2019 Methodology, the subjects of concern embodied in those proposals continued to be raised (e.g., survey methodology, tribal reimbursement, timeline) along with new issues (e.g., adequacy of June 2018 literature review report, possible expansion of the APE, grant funding to reimburse tribal participation, tribal involvement in survey report preparation, restarting the NHPA process). *See* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 1-7; Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 1-2; Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 2-6. Included as well were the Oglala Sioux Tribe's expressions of continued willingness to work with the NRC Staff. *See* Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 8; Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 2; Ex. NRC-211, Oglala Sioux Tribe March 12, 2019 Response at 1, 6-7. Nonetheless, this continuation and expansion of the Tribe's June 2018 proposals provided a reasonable basis for the NRC Staff in March 2019 to again withdraw from further discussions regarding the survey process.

[235] Ex. NRC-176-R, NRC Staff Direct Testimony at 18-19 (Diaz-Toro); *see also* LBP-18-5, 88 NRC at 119-22.

[236] *See* LBP-18-5, 88 NRC at 119-22; *supra* section II.D.

[237] *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 40-42 (Diaz-Toro). Relative to the conduct of oral interviews, the Oglala Sioux Tribe has asserted that, notwithstanding the issues that impaired the start of a site survey in June 2018 and thereafter, the NRC Staff was remiss in not beginning the NEPA information-gathering process by conducting oral interviews with Tribal members. *See* Oglala Sioux Response Statement at 42-50; Ex. OST-42-R, White Declaration at 15 ("NRC Staff took no affirmative steps to conduct any oral interviews."); Ex. OST-043-R, Morgan Declaration at 2 ("The best practice is to conduct oral interviews before, during, and after site surveys to provide cultural context that archaeologists carrying out the surveys often lack."). Mr. Spangler, however, provided a reasonable justification for having a pedestrian survey of the Powertech site with knowledgeable Tribal personnel as the initial step under the February 2019 Methodology. Conducting the survey first is preferable, he maintained, because subsequent oral interviews with Tribal elders will then augment the ground survey observations by providing context to the identified artifacts and features, thereby enhancing what is known about a particular location. *See* Tr. at 1799 (Aug. 28,

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the cost and time estimates that all parties agreed were reasonable under the March 2018 Approach, we find that it likewise was reasonable for the NRC Staff to conclude that, owing to the Tribe's demonstrated unwillingness or unjustifiable failure to work within the parameters of the March 2018 Approach and the February 2019 Methodology, and without reasonable assurance that a practicable alternate approach might meet with joint approval in a reasonable time frame, the necessary information is unavailable.

C. The NRC Staff's Decision to Discontinue Working with the Oglala Sioux Tribe to Obtain Necessary Information Was Reasonable, Despite the Unavailability of That Information

Having found that the NRC Staff's March 2018 Approach and February 2019 Methodology were reasonable and that the necessary information these Staff documents were intended to provide is unavailable because of Oglala Sioux Tribe lack of assistance in critical aspects of their implementation, we now address the reasonableness of the NRC Staff's decision to discontinue its survey implementation efforts without this information.[238]

The NRC Staff developed important elements of the March 2018 Approach, in particular the site survey and oral interview elements, based on the assumption that the Oglala Sioux Tribe would be an active participant.[239] The critical site survey component of the March 2018 Approach was "premised upon the [Oglala Sioux] Tribe's assertion that a Tribal site survey is necessary to identify the specific information deemed essential to the Staff's NEPA analysis."[240] According to the NRC Staff, while an archaeologist with some experience dealing with Native American cultural resources, such as the NRC Staff's contractor Mr. Spangler, "might be able to identify physical remains of certain activities, . . . only Tribal members can assign significance to those sites" and identify "sacred locations that are intangible or not readily identifiable as archaeological

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2019) (Spangler); *see also* Tr. at 1959 (Aug. 29, 2019) (Spangler) (stating that Stoffle methodology (Ex. NRC-181) preferred by Dr. Nickens was not used as a principal basis for the February 2019 methodology in that, as an older methodology that involved taking tribal members to, and interviewing them concerning what they think about, a particular location, this methodology fails to incorporate the newer trend of ensuring tribal engagement early on by means of a landscape-scale survey process).

[238] We note that while the missing cultural resources information likely would not have changed the NRC Staff's overall NEPA impacts determination, which was designated as SMALL to LARGE, *see* Ex. NRC-176-R, NRC Staff Direct Testimony at 45 (Diaz-Toro); *see also* Tr. at 1801 (Aug. 28, 2019) (Diaz-Toro); Tr. at 1930 (Aug. 29, 2019) (Diaz-Toro), as we discuss in section IV.E *infra,* the missing information clearly could have implications for NEPA-associated mitigation measures.

[239] Ex. NRC-192, March 2018 Approach at 2.

[240] NRC Staff Initial Statement at 49.

sites, such as landforms or places of worship and ceremony."[241] Additionally, as the NRC Staff noted, the oral interview element of the March 2018 Approach required the involvement of people with Lakota knowledge who could elaborate on any information gleaned from the site survey.[242] The NRC Staff thus concluded, and we find reasonably so, that it could not complete these elements of the March 2018 Approach without the cooperation and participation of the Oglala Sioux Tribe.

The NRC Staff acknowledged the necessity of the Oglala Sioux Tribe's participation from the beginning stages of the development of the March 2018 Approach. The NRC Staff's preliminary draft approach in December 2017 included involvement by the Oglala Sioux Tribe at each step.[243] The Oglala Sioux Tribe likewise recognized its key role in its December 2017 letter to the NRC Staff, in which THPO Trina Lone Hill stated that "it [is] important to recognize that a physical survey of the site must be conducted in order to allow for identification of cultural resources" and "[a]lso of great importance is the fact that the expertise of the Lakota Sioux is essential to a meaningful and comprehensive survey."[244] The NRC Staff explained in a November 2018 letter to the Oglala Sioux Tribe that the elements of the March 2018 Approach were constructed to "work in harmony rather than in a compartmentalized manner," meaning that each step relied on successful completion of previous milestones with the Tribe.[245] Yet, despite a consensus that the Oglala Sioux Tribe must participate in the March 2018 Approach for a satisfactory analysis under NEPA, the parties were unable to agree on how to implement the March 2018 Approach. These disagreements are described at length in LBP-18-5 and in sections II.D and IV.A *supra.*

Based on the evidentiary record before us, we conclude that the Oglala Sioux Tribe's last-minute attempts in June 2018 to renegotiate fundamental elements of the March 2018 Approach as well as the related modifications subsequently requested to the February 2019 Methodology were not reasonable. These included major modifications affecting the geographic scope, number of participants, overall cost, and the time frame to complete the required cultural resources data collection.

The focus of field survey efforts, according to the NRC Staff in the March 2018 Approach and the February 2019 Methodology,[246] was the possible con-

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[241] Ex. NRC-176-R, NRC Staff Direct Testimony at 5-6, 7 (Spangler).

[242] Ex. NRC-192, March 2018 Approach at 4.

[243] *See* Ex. NRC-191, NRC Staff December 6, 2017 Letter.

[244] Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 3.

[245] Ex. NRC-195, NRC Staff November 21, 2018 Letter at 1.

[246] *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 18 (Diaz-Toro); Ex. NRC-192, March

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struction and operations-impacted area of potential effect (APE) at the Dewey-Burdock site.[247] Yet, the Oglala Sioux Tribe's June 2018 proposals sought to take survey activities to areas twenty miles off of the Dewey-Burdock facility,[248] potentially greatly expanding the scope of any field survey.[249] So too, the three Oglala Sioux Tribe representatives originally contemplated to be involved in field survey activities under the NRC Staff's March 2018 Approach expanded to several dozen Oglala Sioux Tribe technical staff, spiritual leaders, elders, and warrior society leaders under the Tribe's June 2018 proposals,[250] contributing to a significant portion of what the NRC Staff identified was the $2 million overall cost of the Tribe's June 2018 proposals prepared by Mr. White and Oglala Sioux Tribe contractor Mr. Lance Rom of the CRM firm Quality Services, Inc.[251]

2018 Approach at 2; Ex. NRC-214, February 2019 Methodology at 7, 15. Both the March 2018 Approach and the February 2019 Methodology also indicated that during the field survey periods, examination of other facility areas of tribal choosing would be allowed. *See* Ex. NRC-192, March 2018 Approach at 2; Ex. NRC-214, February 2019 Methodology at 15.

[247] The Dewey-Burdock facility totals some 10,580 acres. The APE for facility construction and operations if the option of using liquid waste disposal via deep injection wells is used would total 2637 acres, while the use of the land application option for liquid waste disposal would add approximately 1250 acres to encompass the proposed land application areas. *See* Ex. NRC-008-A-1, at xxx, 3-75; *see also* Ex. BRD-001, Color Version of Figure 3.9-1 from [EIS] for the Dewey-Burdock Project in Custer and Fall River Counties, South Dakota, NUREG-1910, Supplement 4, Vol. 1 (Jan. 2014) (Ex. NRC-008-A-1) at PDF 2.

[248] *See* Ex. NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 4; Tr. at 1971 (Aug. 29, 2019) (Morgan).

[249] We note that the ACHP guidance regarding identification of historic properties in the context of a NHPA section 106 review indicates that "[t]he Section 106 process does not require that the agency search for all historic properties in a given area. Because the APE defines the geographic limits of federal agency responsibility for purposes of Section 106 review, identification efforts are carried out within its boundaries." Ex. NRC-047, ACHP, Meeting the "Reasonable and Good Faith" Identification Standard of Section 106 Review at 3.

[250] *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 18 (Diaz-Toro). *Compare* NRC-192, March 2018 Approach at 2, *with* Ex. NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 2-3. No doubt reflecting the distinction between "method" and "methodology" highlighted by Mr. Spangler at the hearing, *see* Tr. at 1951-52 (Aug. 29, 2019) (Spangler) (stating "methodology is the theory" while "method is the means to do it" that requires tribal input), with regard to the number of representatives per tribe that could be involved in field survey activities, the February 2019 Methodology did not provide a specification, but instead indicated that such surveys could include "spiritual leaders, Tribal elders, and others." Ex. NRC-214, February 2019 Methodology at 13. While this may indicate an NRC Staff recognition of the different types of Tribal personnel that might be involved in such surveys in light of the Oglala Sioux Tribe's June 2018 proposals, it hardly constitutes an acceptance of the much broader scope of those proposals that continued to be reflected in Tribal concerns about the adequacy of the February 2019 Methodology. *See supra* note 234.

[251] Ex. NRC-176-R, NRC Staff Direct Testimony at 40-42 (Diaz-Toro); *see* Ex. OST-042-R,

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Further, as NRC Staff witness Ms. Diaz-Toro testified,[252] the time required to complete the survey work under the Tribe's June 2018 proposals would be, as Oglala Sioux Tribe witness Mr. White likewise declared, "a year to a year and a half,"[253] despite the parties having already subscribed to the notion, in the context of the March 2018 Approach, that two noncontiguous two-week periods was a reasonable amount of time to conduct the site survey.[254] In early 2018, the parties seemed to be in general agreement on the parameters of the March 2018 Approach, and by early 2019, the discontinuities in the June 2018 proposals

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White Declaration at 11, 12; Ex. NRC-197, Oglala Sioux Tribe Survey Methodology Proposal at PDF 6; NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 6. According to Mr. White, Mr. Rom and members of his firm were retained by the Oglala Sioux Tribe to provide the Tribe with professional assistance associated with the June 2018 site survey at a cost of $5000. *See* Ex. OST-42-R, White Declaration at 11. Although Mr. White testified during the evidentiary hearing that after presenting the NRC Staff with its June 2018 proposals the Oglala Sioux Tribe, in conjunction with Quality Services, Inc. personnel, were prepared to begin the site survey in June 2018, *see* Tr. at 1977-78 (Aug. 29, 2019) (White), given the clear disconnect between the NRC's Staff's March 2018 Methodology and the Tribal proposals, as we discuss above, this Tribal readiness has no impact on our determination concerning the reasonableness of the Staff's actions.

[252] Ex. NRC-176-R, NRC Staff Direct Testimony at 41 (Diaz-Toro).

[253] Tr. at 1969 (Aug. 28, 2019) (White). That the Oglala Sioux Tribe's June 2018 proposals would require far longer to complete the fieldwork associated with the Tribal cultural field survey and the oral history research and interviews than the time frames contemplated by the NRC Staff's March 2018 Approach and February 2019 Methodology is evident from provisions calling for Tribal elder encampments during the different seasons of the year, and 10-m transects over the entire 10,000-plus acres of the Dewey-Burdock site. *See* Ex. NRC-198, Oglala Sioux Tribe Updated Survey Methodology Proposal at 3-4, 6. Certainly, as a practical matter, neither of these activities can be accomplished in two, two-week periods. *See* Ex. NRC-176-R, NRC Staff Direct Testimony at 18 (Diaz-Toro).

[254] *See supra* note 218. During the hearing, Dr. Morgan raised concerns about the time needed to conduct a site survey, indicating that "[i]t's just not doable" to survey the approximately 2600-acre APE, to say nothing of the entire 10,000-acre Powertech site, in the two, two-week periods provided for under the March 2018 Approach and the follow-on February 2019 Methodology. Tr. at 1970-72 (Aug. 29, 2019) (Morgan). In contrast, Mr. Spangler indicated that, with adequate Tribal participation, conducting a field survey covering the approximately 2600-acre APE was "definitely doable" in that four-week period. Tr. at 2007 (Aug. 29, 2019) (Spangler). The width of the transects (i.e., the intervals between surveyors) used to cover the survey area undoubtedly would impact the site survey's "doability." *See* Tr. at 1986 (Aug. 29, 2019) (White) (stating that while Tribe typically does three- or five-meter transects, because of time constraints under March 2018 Approach would use nine-meter transects); Tr. at 1994 (Aug. 29, 2019) (Spangler/Morgan) (indicating South Dakota standard is 30 meters, depending on ground visibility); NRC-023, Powertech Scope of Work at 2, 3 n.2 (assuming 30-meter transects generally used by northern Plains region archaeologists). Nonetheless, in light of the level of Tribal participation anticipated by Mr. White in connection with the February 2019 Methodology, *see* Tr. at 2004 (Aug. 29, 2019) (given tribes participating in February 2019 discussions regarding Methodology, increase in number of people would allow for coverage of APE acreage) (White), we cannot say that Mr. Spangler's site coverage estimate is unreasonable.

continued to form the basis for the Tribe's objections to the follow-on February 2019 Methodology. The conspicuously widening gap between the NRC Staff and the Oglala Sioux Tribe on these major aspects of the NRC Staff's proposed cultural resources survey process, without any apparent indication that consensus eventually might be reached, provided a reasonable basis for the NRC Staff's determination to discontinue further interactions with the Oglala Sioux Tribe regarding the survey.

Moreover, further supporting our finding in this regard is the fact that while the Oglala Sioux Tribe previously requested "a scientifically sound cultural resources survey"[255] and rejected previous NRC Staff proposals that it described as containing "no identifiable scientific methodology for a cultural resources survey,"[256] the Tribe's recent critiques of the NRC Staff's proposed methodology criticize the very elements that the Tribe hitherto claimed were absent.[257] Even though the entire structure of the NRC Staff's proposed methodology is predicated on reconciling a scientific method with traditional cultural values and perspectives,[258] the Oglala Sioux Tribe maintains its objections.[259]

Thus, given the Tribe's apparently evolving position on the application of scientific principles in the proposed methodology, as well as the issues with the logistics and scope of the survey process described above, we find the NRC Staff reasonably concluded that further negotiations regarding the survey process would not be productive.

D. The NRC Staff Has Satisfied NEPA's Standard of "Reasonable" Action Consistent with the Council on Environmental Quality (CEQ) Regulatory Provision Regarding Unavailable Information

The information deficit outlined above is hardly the first instance in which information that would be considered necessary for the preparation of an envi-

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[255] Ex. NRC-219, Oglala Sioux Tribe March 30, 2018 Response at 1.

[256] Oglala Sioux Tribe's Response in Opposition to NRC Staff's Motion for Summary Disposition of Contention 1A, at 7-8 (Sept. 21, 2018).

[257] *See, e.g.,* Oglala Sioux Tribe Response Statement at 19 (June 28, 2019) ("The [d]raft [m]ethodology relies on stilted and outmoded 'scientific method' and 'empirical evidence' in a way that violates NEPA's mandate that all federal agencies use a 'systematic interdisciplinary approach' that involves 'unquantified' considerations and 'ecological information.'").

[258] *See supra* note 215.

[259] *See* Oglala Sioux Tribe Response Statement at 16 ("NRC Staff is wrong in its narrow interpretation of 'scientific' in the context of NEPA as a matter of fact and law."); Tr. at 1953 (Aug. 29, 2019) (Morgan) ("And so you can use whatever flowery language you want to, or you can use whatever scientific terms you want to, and it still comes down to that there's been a lack of tribal input.").

ronmental review document was found to be unavailable.[260] "If [NEPA] barred agency action until this information became available, it is unlikely that any project requiring an environmental impact statement would ever be completed."[261] The CEQ recognized this situation and incorporated guidance into 40 C.F.R. § 1502.22 that assigns an agency certain responsibilities when it determines circumstances exist in which relevant information is missing or is unavailable.[262]

Of course, CEQ regulations generally are not controlling on the NRC, at least to the extent they have not been incorporated by the agency into 10 C.F.R. Part 51, and the unadopted provisions of 40 C.F.R. § 1502.22 are not binding on the NRC Staff in this case.[263] Nevertheless, the Commission has recognized that such CEQ regulations can be useful guides for determining what actions are reasonable under NEPA.[264] In LBP-17-9, we stated that "if the NRC Staff chooses a methodology that does not include complete information about adverse effects on the Tribe's cultural resources, the NRC Staff would need to include an explanation that satisfies the requirements of 40 C.F.R. § 1502.22."[265] We further stated that

> if the NRC Staff concludes there is no affordable alternative to the open-site survey for assessing the missing Native American cultural resources, it must at a minimum provide an explanation of this type to satisfy NEPA that is specific to the cultural resources of the Oglala Sioux Tribe and the other Native American tribes currently missing from the FSEIS.[266]

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[260] *See, e.g., WildEarth Guardians v. U.S. Forest Serv.,* 828 F. Supp. 2d 1223, 1240 (D. Colo. 2011); *Village of False Pass v. Watt,* 565 F. Supp. 1123 (D. Alaska 1983).

[261] *Village of False Pass,* 565 F. Supp. at 1149 (citing *Jicarilla Apache Tribe of Indians v. Morton,* 471 F.2d 1275, 1280 & n.11 (9th Cir. 1973)).

[262] 40 C.F.R. § 1502.22; *see also* CEQ Incomplete/Unavailable Information Regulations, 51 Fed. Reg. at 15,618. It might be debated whether the cultural resources information at issue in this proceeding is "incomplete" under the terms of section 1502.22, which seems to turn on whether some, but not all, of a body of relevant information is included in the EIS analysis, as opposed to "unavailable," which arguably denotes a body of relevant information that is not in the analysis at all. Given the factual circumstances of this case, for purposes of this decision, we employ the term "unavailable." Moreover, under the provisions of section 1502.22, it seemingly makes little difference which term is used because for both types of information the definitional (information is "incomplete" or "unavailable" if it "cannot be obtained because the overall costs are exorbitant or the means of obtaining it are not known") and procedural (explanatory statement regarding information must be included in the EIS) conditions regarding the information are essentially the same.

[263] *See supra* section III.C (citing *Diablo Canyon,* CLI-11-11, 74 NRC at 444).

[264] CLI-19-9, 90 NRC at 135.

[265] LBP-17-9, 86 NRC at 200.

[266] *Id.*

In LBP-18-5, we found that issues of material fact remained as to whether it was "not reasonably feasible for the [NRC] Staff to obtain the information from the Tribe."[267] The 2019 evidentiary hearing focused on these issues.

Although the NRC Staff has not updated its FSEIS to address the deficiencies identified in LBP-15-16, our various findings regarding the reasonableness of the NRC Staff's actions in connection with the unavailable cultural resources information needed to address those deficits are consistent with the provisions of section 1502.22. That section contains transparency admonitions that "the agency shall always make clear that such information is lacking" and "shall include" the following elements within the environmental impact statement:

(1) a statement of the information's unavailability;

(2) a statement of the unavailable information's relevance "in evaluating reasonably foreseeable significant adverse impacts on the human environment";

(3) "a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment"; and

(4) "the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community."[268]

Information relevant to these items is in the FSEIS or this decision, as it supplements the FSEIS per the discussion in section IV.G *infra.*

Additionally, section 1502.22(b) poses the question as to whether the information "cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known,"[269] bearing in mind that "the term 'overall costs' encompasses financial costs and other costs such as costs in terms of time (delay) and personnel."[270] Our findings in sections IV.A and IV.B regarding the potential cost and time delays associated with the Oglala Sioux Tribe's June 2018 proposals establish that the information the NRC Staff has not been able to obtain falls within that definition, such that the disclosures and discussion regarding cultural resources in the FSEIS and this decision are sufficient to comply with the precepts of section 1502.22, as well as demonstrate,

[267] LBP-18-5, 88 NRC at 130 (quoting NRC Staff August 2018 Dispositive Motion at 32-33).
[268] 40 C.F.R. § 1502.22(b)(1).
[269] *Id.* § 1502.22(b).
[270] CEQ Incomplete/Unavailable Information Regulations, 51 Fed. Reg. at 15,622.

as we discussed in more detail in section IV.C *supra,* that the NRC Staff's "determination to discontinue the survey was reasonable."[271]

E. Post-Operational Identification and Protection of Traditional Cultural Resources Can Be Facilitated Through the Existing Programmatic Agreement

While we find that legal and factual evidence exists to support the NRC Staff's determination that the missing tribal cultural resources information is unavailable, we nonetheless consider extant a significant unresolved matter, i.e., the question of how the Tribal cultural resources that almost inexorably remain on the Dewey-Burdock site will be identified and protected as facility construction and operation goes forward.[272] Given the NRC Staff's planned attempt to conduct ground-truthing and oral history surveys to address that question was not able to be implemented, the provisions of the existing PA covering the mitigation of post-licensing facility construction and operation cultural resource impacts will govern the future discovery and treatment of cultural resources on site.[273]

In that regard, as was noted in the Board's April 2015 partial initial decision, in April 2014 following the issuance of the NRC Staff's FSEIS but before the

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[271] CLI-19-9, 90 NRC at 135.

[272] A number of cultural resources already were identified as a result of a 2013 survey of the Powertech site conducted by members of seven tribes other than the Oglala Sioux Tribe. *See* Ex. NRC-008-A-1, FSEIS at 3-76 to -82; Ex. NRC-008-B-2, FSEIS at F-1 to -30. Nonetheless, given the recognized status of the Powertech site and the surrounding area as part of the Tribal homeland and the recognition that only Tribal personnel will be fully cognizant of what constitutes a Tribal cultural resource, *see* Ex. NRC-176-R, NRC Staff Direct Testimony at 11, 14 (Diaz-Toro), there can be no doubt that, although their significance is indeterminate, some as-not-yet identified Oglala Sioux Tribe cultural resources can be found on the Powertech site. *See* Ex. OST-042-R, White Declaration at 7-8 (indicating likelihood that cultural artifacts and evidence of burial grounds exist on Powertech site "is strong"), 10 (stating number and density of cultural resources at site demonstrate that mining activity is likely to impact Oglala Sioux Tribe cultural resources); Ex. OST-043-R, Morgan Declaration at 3 (declaring previous identification of cultural resources on Powertech site indicates "there may well be more that only the Tribe can identify"); Ex. INT-023, Affidavits (providing affidavits from Lakota tribal members asserting knowledge of Oglala Lakota cultural resources on the Dewey-Burdock site); Ex. NRC-224, Nickens, Paul, Literature Review of Lakota Historic, Cultural, and Religious Resources for the Dewey-Burdock ISR Project at 42 [hereinafter Nickens Literature Review] (indicating that while cultural resource finds to date on Dewey-Burdock site do not indicate cultural affiliation with any of the region's historic Tribes, contemporary Oglala Sioux Tribe accounts of historic period use of area within site boundaries and stone features identified in 2013 tribal surveys fitting well within LeBeau framework of potentially significant Lakota traditional places call for further investigation).

[273] *See* Ex. NRC-018-A, Programmatic Agreement at 2.

NRC Staff published its NEPA ROD,[274] the NRC Staff adopted the PA, which is considered a condition of the Powertech license.[275] As was the case with the 2013 site survey, however, the PA did not have the support of the Oglala Sioux Tribe and a number of other affected Tribes identified by the NRC Staff as consulting parties.[276] Thus, in becoming a signatory to the PA, the Advisory Council on Historic Preservation (ACHP) recognized this lack of consensus and observed:

> This PA incorporates a path forward to continue working with consulting tribes to conclude the identification and evaluation process. In addition, the PA sets forth a process for addressing adverse effects to historic properties that can't be avoided as the project is implemented. Consulting tribes will review and comment on all determinations of eligibility and effect and in the development of treatment plans for adverse effects. NRC's agreement to this protocol and its willingness to continue to collaborate with the consulting tribes and other consulting parties as Dewey-Burdock is implemented is the appropriate next step. Accordingly, we have signed the PA to conclude the Section 106 review process. We appreciated the efforts of NRC staff to negotiate an outcome that balances project goals and historic preservation concerns.[277]

What this ACHP comment recognizes, and so is apropos to the situation both then and now, is that notwithstanding the lack of a site survey identifying Oglala Sioux Tribe-recognized cultural resources, the PA will provide protection for onsite cultural resources as they may be encountered during facility construction and operation.[278]

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[274] *See* LBP-15-16, 81 NRC at 694 (finding that although the PA was completed after the FSEIS was released, its adoption before the ROD was issued satisfied NEPA).

[275] *See id.* at 657 n.233 (indicating that by its terms, PA is a license condition (citing Ex. NRC-018-A, Programmatic Agreement at 4)); *see also* Ex. NRC-012, Powertech License at 5-6 (section 9.8).

[276] *See* LBP-15-16, 81 NRC at 649; *see also* Ex. OST-012, Statement of Contentions of Oglala Sioux Tribe Following Issuance of [FSEIS] at PDF 132 (Letter from Bryan V. Brewer, President, Oglala Sioux Tribe, to Haimanot Yilma, Project Manager, Environmental Review Branch (ERB), NRC (Feb. 5, 2014)); Ex. OST-42-R, White Declaration at 9, 10.

[277] Ex. NRC-018-D, Letter from Reid Nelson, Director, Office of Federal Agency Programs, ACHP, to Kevin Hsueh, Chief, ERB, NRC, at 1 (Apr. 7, 2014).

[278] As NRC Staff witness Mr. Spangler recognized, while the eligibility of cultural resources for NHPA protection is governed by four criteria developed by the National Park Service to evaluate properties for inclusion in the NHPA-associated National Register of Historic Places, *see* Ex. NRC-179, U.S. Department of Interior, National Park Service, National Register Bulletin 15, "How to Apply the National Register Criteria for Evaluation" (Rev. 1997) at i, 1-2, NEPA allows more flexibility in protecting NHPA-ineligible sites, so that, for example, tribal sites with intangible values

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Of particular note in this regard is PA Stipulation 9, which specifies how "Unanticipated Discoveries" are to be handled during facility construction and operation, such as those that arise due to the current dearth of cultural resources input from the Oglala Sioux Tribe.[279] NRC Staff witness Mr. Spangler explained it is standard practice that, in conjunction with construction or some operational activity that may involve ground disturbance potentially impacting cultural resources, a monitor with appropriate archaeological expertise is employed to be onsite observing the operation with the authority to halt the activity if a cultural resources artifact or feature in danger of disturbance is observed.[280] PA Stipulation 13(c) provides for such a monitor as part of a monitoring plan, which Powertech will develop, subject to NRC Staff review, and which will govern appropriate practices on site during facility development and operation.[281] Further, under the terms of PA Stipulation 5(e)(ii), that monitoring should be "by a qualified archaeologist and/or Tribal monitor,"[282] which NRC Staff witness

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that might not be fit neatly within the NHPA protection scheme nonetheless would be eligible for NEPA-associated avoidance, mitigation, and data recovery protection strategies in the context of carrying out a programmatic agreement. *See* Tr. at 1896-97 (Aug. 28, 2019) (Spangler); *see also* Tr. at 1897-98 (Aug 28, 2109), 1930-36 (Aug. 29, 2019) (Diaz-Toro) (explaining how NRC Staff works with tribes to understand and document the significance of tribal-identified cultural resources on a facility site, whether they are NHPA-eligible or not).

[279] *See* Ex. NRC-018-A, Programmatic Agreement at 10-11. As was noted during the hearing, in one sense these Oglala Sioux Tribe-related cultural resource items are not truly "unanticipated" because no site survey was conducted with Oglala Sioux Tribe members participating and these types of as yet unidentified artifacts undoubtedly exist. Tr. at 2034-35 (Bollwerk, A.J.). Nonetheless, in the context of post-licensing construction and operational activities, these types of artifacts can be considered "unanticipated." Tr. at 2036 (Aug. 29, 2019) (Diaz-Toro).

[280] *See* Tr. at 2037 (Aug. 29, 2019) (Spangler); *see also* NRC-018-A, Programmatic Agreement, at 13 ("In the case of an unanticipated discovery . . . , the Monitor shall have authority to stop certain construction activities.").

[281] *See* Ex. NRC-018-A, Programmatic Agreement at 13. Although NRC Staff witness Ms. Diaz-Toro indicated that the PA did not have any provisions regarding NRC approval of such a monitor; *see* Tr. at 2074-76 (Aug. 29, 2019), to the degree that such a monitor is part of the monitoring plan initially developed by Powertech, *see* Ex. NRC-018-A, Programmatic Agreement at 12-13, and that NRC "will request that Powertech make any necessary revisions to the plan," after which "the revised Monitoring Plan will remain in effect for all covered ground-disturbing activities during the license period," *id.* at 13, NRC does indeed seem to have a role in the designation of an appropriate monitor. Moreover, while PA Stipulation 13(c) gives Powertech primary responsibility for retaining a monitor, *id.*; *see also* Tr. at 2051 (Aug. 29, 2019), if the circumstances warranted, the agency undoubtedly could take a more direct role in such post-licensing monitoring activities under the PA by arranging for such monitoring by an agency-procured CRM firm, *see* Tr. at 1724-25, 1728, 1738-42, 1755-58 (Aug. 28, 2019) (Diaz-Toro) (describing circumstances under programmatic agreement regarding Strata ISR facility in which agency contracted for CRM services to complete NHPA section 106 responsibilities in conjunction with NEPA review).

[282] *Id.* at 8.

Mr. Spangler suggested should include a Tribal monitor,[283] a recommendation that would be fully in accord with the directive in PA Stipulation 13(c)(i) that "[p]reference will be given to individuals meeting [the Secretary of the Interior's Professional Qualifications for Archaeology] who are employed by tribal enterprises, especially during phases of the monitoring program where sites with religious and cultural significance to the Tribes might be affected."[284]

Certainly in this instance, given the lack of pre-facility construction and operation identification of cultural resources by the Oglala Sioux Tribe or other consulted Tribes, this monitoring process must take on additional significance if the purpose of Stipulation 13 is to be fully realized.[285] During the evidentiary hearing, the NRC Staff committed to notify the consulting tribes, including the Oglala Sioux Tribe, of the identity of the monitor whose services are engaged by Powertech pursuant to Stipulation 13(c).[286] Given the circumstances here, we consider this a laudable pledge worthy of addition to the overall process under PA Stipulation 13(b) for NRC Staff review of a proposed Powertech monitoring plan prior to the initiation of facility construction activities that deserves incorporation into the PA. As such, we add a new license condition provision to PA Stipulation 13(c),[287] Stipulation 13(c)(iii), that provides as follows:

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[283] Tr. at 2042 (Aug. 29, 2019).

[284] NRC-018-A, Programmatic Agreement at 13.

[285] *Id.* at 12 ("NRC affirms avoidance of adverse effects to historic properties remains the preferred course of action.").

[286] *See* Tr. at 2074-75 (Aug. 29, 2019) (Diaz-Toro). This notification would be provided even though none of the relevant tribes concurred in the PA. *See* Tr. at 2075 (Aug. 29, 2019) (Diaz-Toro).

Further in this regard, given the controversy over the issue of tribal compensation, *see* section IV.B *supra,* we would anticipate that determinations about the engagement of, and compensation for, Tribal monitors or other Tribal members involved in the monitoring process would be informed by PA Stipulation 6(f), which concerns cultural resource identification if power transmission lines are installed outside the licensed facility boundary and states:

> Powertech shall offer to provide appropriate financial compensation to Tribal Representatives for the work on the identification of properties of religious and cultural significance. The identification of properties of religious and cultural significance will occur at the same time or prior to identification of archaeological properties.

NRC-018-A, Programmatic Agreement at 9.

[287] Relative to this license condition, the PA Stipulation 13(c) language regarding the retention of a monitor seemingly permits either an entity (such as a TCP or CRM firm like Quality Services, Inc. or Makoche Wowapi) or an individual (such as a CRM/TCP consultant like Dr. Morgan) to fulfill this role. *See id.* at 13. Given that a firm may utilize multiple staff or affiliated personnel to perform monitoring work, *see* Tr. at 1943-45, 2041 (Aug. 29, 2019) (Morgan), we would not anticipate that the use of multiple individuals associated with the firm providing monitoring services, as opposed to a change in the monitoring firm, would require notice to the consulting Tribes.

Also, in adding this PA provision, the Board incorporates a 30-day review and comment period

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iii. If the identity of the Monitor engaged by Powertech under Stipulation 13(c) to provide services is not specified in the Monitoring Plan provided to NRC under Stipulation 13(b)(i), when Powertech engages the Monitor, Powertech shall promptly notify the NRC of the identity of the Monitor, which in turn will distribute that information to the signatories and consulting Tribes to this agreement for a 30-day review and comment period. Thereafter, if a new Monitor is engaged by Powertech, Powertech shall promptly notify the NRC of the identity of that Monitor, which will again distribute that information to the signatories and consulting Tribes to this agreement for a 30-day review and comment period.

F. The NRC Staff Has Satisfied Its Hard Look Requirement Under NEPA

In LBP-18-5, we concluded that the NRC Staff had not met its hard look requirement under NEPA.[288] A material factual dispute existed as to the reasonableness of the NRC Staff's efforts to implement its March 2018 Approach and the NRC Staff's ultimate decision to discontinue work.[289] These factual disputes were addressed at the August 2019 evidentiary hearing. We now find that, despite the absence of information from the planned cultural resources survey that otherwise would be necessary to complete a supplemental EIS,[290] under

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consistent with the review and comment period for the Powertech monitoring plan generally. *See* Ex. NRC-018-A, Programmatic Agreement at 13 (PA Stipulation 13(b)(i)). And the Board includes this PA provision with the understanding that any disputes arising from comments by PA signatories or consulting Tribes concerning Monitor selection would be resolved consistent with the existing PA provision governing the resolution of disputes regarding implementation of the terms of the PA. *See id.* at 13 (PA Stipulation 14).

[288] LBP-18-5, 88 NRC at 125-29.

[289] *Id.* at 132-34.

[290] Although the cultural resource survey process envisioned by the NRC Staff in response to LBP-15-16 never fully materialized, two additions to the store of cultural resources information regarding the Powertech site were generated in that decision's wake. One was a report compiled by the NRC Staff's then-contractor Dr. Nickens summarizing his activities and those of two SC&A personnel during the week of June 11-14, 2018, on the Powertech site. Their visit was to (1) revisit and further document 20 tribal sites identified during the 2013 tribal survey that lie within the designated ISR project APE; (2) conduct a viewshed analysis to determine whether any of the numerous regional places of tribal cultural or religious significance, as identified by a contemporaneous literature review, could be seen from the Dewey-Burdock project area; and (3) evaluate the current status of bald eagle nesting within the ISR project area that was a potential place/resource of religious significance to Lakota Tribes. *See* Ex. NRC-196, Summary of Tribal Cultural Heritage Resources Data Acquired in June 2018 at the Dewey-Burdock In Situ Uranium Recovery Project - Fall River and Custer Counties, South Dakota at 5. The Oglala Sioux Tribe did not challenge the conclusions of this report.

On the other hand, the Oglala Sioux Tribe has questioned the efficacy of the above-referenced

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the circumstances, the NRC Staff has satisfied the hard look requirement under NEPA.

The NRC Staff's actions taken after the issuance of both LBP-17-9 and LBP-18-5 show a diligent effort to fulfill its NEPA "hard look" obligation. Relative to the NRC Staff's activities after LBP-17-9, in the face of a Board ruling that there remained material factual questions about the reasonableness of its survey methodology, the NRC Staff produced the March 2018 Approach that, based on the parties' responses at the time, appeared to provide a firm foundation for moving forward with the survey process.[291] And relative to its post-LBP-18-5 activities, despite the availability of the Board-proffered option to proceed di-

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literature review, *see supra* note 272, in which Dr. Nickens attempted to compile and evaluate the significant existing published information relevant to the cultural resources evaluation for the Powertech site's NEPA review. *See* Ex. NRC-224, Nickens Literature Review at 9-10; *see also* Tr. at 2061 (Aug. 29, 2019) (Spangler) (describing Nickens literature review as "a Class I overview, which is basically a synthesis of all of the cultural materials known about a certain area that are reasonably available"). The Oglala Sioux Tribe has been particularly critical of the Nickens report's description of the location of the "Race Track," a culturally significant area the description of which the Tribe asserts "is inaccurate and taken from an outdated map that was prepared by Dr. Craig Howe for purposes that did not involve location/protection of specific cultural sites or sacred landscapes." Ex. NRC-203, Oglala Sioux Tribe January 11, 2019 Response at 3.

To support its criticism, the Oglala Sioux Tribe presented the testimony of Dr. Howe, who asserted that Dr. Nickens' report, besides failing to utilize some of the early core reference works by anthropologists and ethnologists familiar with Lakota history and culture, contained significant inaccuracies, particularly the misalignment of the Race Track that encircles the interior of the geographically sacred Black Hills area relative to the Dewey-Burdock site. According to Dr. Howe, referencing a map Dr. Howe created for a 2011 publication he authored (with others), Dr. Nickens' report indicates the Race Track is situated some four miles north of the Powertech site. *See* Ex. OST-45-R, Howe Declaration at 2-3; Tr. at 1842-44 (Aug. 28, 2019) (Howe); *see also* Nickens Literature Review at 22, 32-33, 35. This location designation, Dr. Howe asserts, reflects a failure to either contact him or seek public comment on Dr. Nickens' report so that he (and perhaps others) might have explained more recent developments regarding understanding of the Race Track and its location that would place the Powertech site "on top" of the Race Track, thereby bringing the ISR site within the category of impacted "properties of traditional religious and cultural importance." Ex. OST-45-R, Howe Declaration at 3; *see* Tr. at 1844-45 (Aug. 28, 2019) (Howe).

Putting aside the fact that a reference to the significance of the Race Track to North Plains tribes in the FSEIS apparently did not engender any public comments about its location or importance relative to the Dewey-Burdock site, *see* Ex. NRC-008-A-1, FSEIS at 3-86; Ex. NRC-008-B-2, FSEIS at E-18 to -257, we observe that Dr. Nickens' report, while indicating that the red clay valley geological formation that is generally denoted as the Race Track does lie a few miles from the Powertech site, also explained that the Race Track designation of cultural significance is not limited solely to sites within that geological formation and that information regarding Tribal views of cultural places and project landscape impacts would continue to accrue with the planned summer 2018 site survey and subsequent Tribal elder interviews. *See* Ex. NRC-224, Nickens Literature Review at 13, 20, 24, 42; *see also* Tr. at 1803-04 (Aug. 28, 2019) (Diaz-Toro). Of course, for the reasons we have detailed in this decision, those activities did not take place.

[291] *See supra* notes 51, 218-20 and accompanying text.

rectly to an expeditious evidentiary hearing to address still unresolved material issues of fact about its survey approach and the implementation of that approach, the NRC Staff chose to resume working with its March 2018 Approach, expanding it into the February 2019 Methodology.[292] The NRC Staff identified a qualified contractor, Mr. Spangler, and hired him to develop a scientific methodology to conduct the all-important site survey in a culturally sensitive manner when the previous contractor Dr. Nickens departed.[293] We have found the NRC Staff's selected contractor Mr. Spangler was well qualified to facilitate the field survey and prepare the reports required to potentially resolve the issues raised by Contention 1A.[294] Both the NRC Staff's March 2018 Approach and the proposed February 2019 Methodology, based on accepted scientific methodologies, demonstrated a reasonable effort on the part of the NRC Staff to work toward a supplemental NEPA impacts analysis regarding cultural resources on the Dewey-Burdock project.[295]

The NRC Staff also involved an agency tribal liaison in January 2019, as requested by the Oglala Sioux Tribe.[296] After the issuance of both LBP-17-9 and LBP-18-5, the NRC Staff communicated with the Tribe by various means, including letter, webinar, and email, and travelled to the Pine Ridge Reservation in February 2019.[297] Additionally, while the NRC Staff displayed a willingness to address the Oglala Sioux Tribe's concerns regarding potential revisions to the confidentiality agreements, it never received any proposed language or sample agreements from the Tribe.[298] Taken together, these actions show that, although the NRC Staff did not ultimately complete a supplemental NEPA analysis, it

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[292] *See* Ex. NRC-195, NRC November 21, 2018 Letter to Oglala Sioux Tribe Resuming Implementation of the NRC Staff March 16, 2018 Approach.

[293] With Dr. Nickens no longer available, Mr. Spangler expanded the NRC Staff's research on the different methods that federal and state agencies have employed successfully with Native American tribes to conduct cultural research surveys. The NRC Staff's March 2018 Methodology and its February 2019 Methodology thus are based on Dr. Nickens and Mr. Spangler's attempts to augment the existing cultural resource inventory data for the Powertech site by including Tribal perspectives on the nature and significance of cultural resources. *See* NRC-176-R, NRC Staff Direct Testimony at 5-9 (Spangler, Diaz-Toro).

[294] *See supra* note 173 and accompanying textual discussion of Mr. Spangler's qualifications.

[295] *See supra* section IV.A.

[296] Tr. at 1526 (Jan. 29, 2019). The Board finds that the action of engaging a tribal liaison demonstrated a willingness to take the Tribe's concerns into account, although we note that the tribal liaison only participated in two interactions with the Tribe, on February 8 and February 19, 2019, and did not attend the in-person meeting at the Pine Ridge Reservation on February 22, 2019. *See* NRC-176-R, NRC Staff Direct Testimony at 20; Tr. at 2016-18 (Aug. 29, 2019) (Diaz-Toro).

[297] *See* LBP-18-5, 88 NRC at 105-09, 119; Ex. NRC-176-R, NRC Staff Direct Testimony at 24 (Diaz-Toro).

[298] *See supra* note 217; LBP-18-5, 88 NRC at 108, 136; Tr. at 1922-23 (Aug. 28, 2019) (Diaz-Toro); Tr. at 46 (Aug. 29, 2019 closed session) (Diaz-Toro).

acted reasonably to develop and implement the March 2018 Approach and the February 2019 Methodology.

To be sure, the inability of the NRC Staff to gain the additional information about cultural resources on the Dewey-Burdock site that would have come from the successful completion of the survey process is troubling, given that information would inform a determination about the impact of construction and operational activities on the Powertech site on these currently unidentified cultural resources. Nonetheless, that information is already encompassed in the EIS finding that the overall impacts of the facility on cultural resources will be SMALL to LARGE.[299] Further, as we discussed in section IV.E *supra,* the related issues regarding the adequacy of impact mitigation via protection and avoidance that arise because of this lack of current identification of these cultural resources can still be adequately addressed in the context of the existing PA, as modified by the Board.[300]

We thus find that a preponderance of the evidence establishes that the NRC Staff did indeed take the requisite "hard look" required by NEPA, notwithstanding the missing cultural resources information and potential additional impacts analysis that might have resulted had the proposed survey process been fully implemented.

G. NRC Staff Need Not Publish and Seek Public Comment on the Unavailability of the Cultural Resources Information in a Supplement to the Powertech FSEIS

In LBP-15-16, the Board stated that because of the NRC Staff's failure to adequately address Native American cultural resources in the FSEIS, the "FSEIS and Record of Decision in the case must be supplemented, if necessary, to include any cultural, historic, or religious sites identified and to discuss any mitigation measures necessary to avoid any adverse effects."[301] Although the NRC Staff contemplated supplementing the FSEIS with the information it gath-

[299] *See supra* notes 14, 238.

[300] In his prefiled testimony, Mr. White expressed concern that this "SMALL" to "LARGE" designation was too broad and generalized to constitute a useful impacts analysis. *See* Ex. OST-042-R, White Declaration at 15-16. This might be an issue if such a broad designation were applied to describe project impacts generally across the spectrum of subject matter areas being considered in an EIS analysis, but as the Staff indicated, such a designation, if accurate, is not improper in analyzing a particular subject matter area so long as there is an analysis of specific mitigation measures needed to address the range of impacts in that area. *See* Tr. at 1800-01 (Aug. 28, 2019), 1930-33 (Aug. 29, 2019) (Diaz-Toro).

[301] LBP-15-16, 81 NRC at 708.

ered as a result of any additional cultural resources survey efforts,[302] it ultimately determined not to prepare such a supplement for the reasons we described previously in section IV.C *supra.* In opposing the NRC Staff's April 3, 2019 request to convene an evidentiary hearing to resolve Contention 1A, the Oglala Sioux Tribe maintained that such a hearing was improper until after the NRC Staff first issued for public comment a draft FSEIS supplement addressing any new information and explaining why additional information is unavailable consistent with 40 C.F.R. § 1502.22, followed by a final FSEIS supplement addressing any comments.[303] The NRC Staff, in turn, asserted that the established agency practice of allowing the evidentiary hearing record to supplement and/or correct any deficiencies in a final EIS means that in this instance it is unnecessary for the NRC Staff to issue an FSEIS supplement regarding the unavailability of the cultural resources information.[304] Both in granting the NRC Staff's request to convene an evidentiary hearing and denying a subsequent Oglala Sioux Tribe motion in limine raising the same issue, the Board rejected the Oglala Sioux Tribe's arguments in this regard.[305] At the same time, the Board acknowledged that this legal issue remained extant so as to warrant resolution in the context of its post-hearing merits ruling on Contention 1A.[306]

Below, we outline in more detail the parties' positions on this issue and set forth our ruling on this discrete matter.

1. Parties' Positions on Need for FSEIS Supplementation

In challenging the Staff's request for an evidentiary hearing on Contention 1A, besides asserting that there was an insufficient legal and factual basis for proceeding to an evidentiary hearing on the NRC Staff's claim that it acted reasonably in abandoning its supplementation efforts,[307] the Oglala Sioux Tribe also maintained that the NRC Staff violated the procedural precepts of NEPA. Specifically, the Oglala Sioux Tribe accused the NRC Staff of violating the mandate in 40 C.F.R. § 1502.22 that an explanation must be included "within the [EIS]" about why information relevant to reasonably foreseeable adverse

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[302] *See* Ex. NRC-201, NRC March 16, 2018 Letter to Oglala Sioux Tribe Transmitting NRC's Approach to Identify Historic, Cultural, and Religious Sites, Encl. 1, at 1; Ex. BRD-005, January 25, 2019 Staff Letter, Encl. 2, at 2; *see also* Ex. BRD-007, NRC Staff February 20, 2018 Letter to Powertech at 1; Ex. BRD-008, NRC Staff April 12, 2018 Letter at 1.

[303] Oglala Sioux Tribe Evidentiary Hearing Response at 10-18.

[304] *See* Tr. at 1636 (Apr. 23, 2019).

[305] *See* Board Order Denying Oglala Sioux Tribe Motion to Strike at 4-5.

[306] *See id.*; Licensing Board Order (Scheduling Prehearing Teleconference) at 4 (July 29, 2019) (unpublished).

[307] *See* Oglala Sioux Tribe Evidentiary Hearing Response at 11-14.

impacts is unavailable. According to the Oglala Sioux Tribe, the NRC's Staff's lack of an "unavailability" explanation in a supplement to the FSEIS has not only contravened the public's right under NEPA to comment on those claims, but also deprived the Oglala Sioux Tribe of an opportunity to interpose challenges to those claims in the form of new or amended contentions.[308] So too, in its response position statement for the hearing and its proposed findings of fact/conclusions of law, the Oglala Sioux Tribe reiterated its argument that, in the absence of an FSEIS supplement explaining the basis for the NRC Staff's position that relevant missing cultural resources information is unavailable as required by section 1502.22, the NRC Staff's attempt to rely on section 1502.22 must be rejected as procedurally deficient.[309]

For its part, the NRC Staff asserted in its hearing-related initial and reply statements of position and its proposed findings of fact and conclusions of law that it is not necessary to first supplement the Dewey-Burdock FSEIS with an explanation of the basis for its claim that additional Contention 1A-associated cultural resources information is "unavailable" within the meaning of section 1502.22. Rather, the NRC Staff maintained that, consistent with longstanding agency precedent, the record compiled during the Board's August 2019 adjudicatory hearing on the unavailability issue is consistent with section 1502.22 and can provide the basis for resolving Contention 1A.[310]

2. Board Ruling

Longstanding agency precedent establishes that, in an appropriate circumstance, a deficiency in an agency NEPA statement can be rectified by a licensing board based on the record of an evidentiary hearing regarding an intervenor contention challenging that environmental statement. Not long after the seminal 1971 *Calvert Cliffs* decision directing the Atomic Energy Commission (AEC) to consider radiological and non-radiological environmental impacts as part of the agency's licensing process,[311] an Atomic Safety and Licensing Appeal Board recognized that a final environmental impact statement

> is subject to modification by the Licensing Board in light of other evidence in the record. In short, the [final EIS] is to be reevaluated in the context of the entire

[308] *See id.* at 14-18.

[309] *See* Oglala Sioux Tribe Response Statement at 31-38; Oglala Sioux Tribe Proposed Findings at 38-46; Oglala Sioux Tribe Reply Findings at 5-6.

[310] *See* NRC Staff Initial Statement at 23; NRC Staff Reply Statement at 14-16; NRC Staff Proposed Findings at 51; NRC Staff Reply Findings at 5-6.

[311] *Calvert Cliffs' Coordinating Comm., Inc. v. AEC,* 449 F.2d 1109, 1114 (D.C. Cir. 1971), *cert. denied,* 404 U.S. 942 (1972).

> record of the proceeding and any necessary modifications are to be made through the vehicle of the initial decision.[312]

That precept was also recognized by an appeal board as continuing to be applicable after the AEC's regulatory authority was ceded to the NRC by reason of passage of the Energy Reorganization Act of 1974,[313] and subsequently was acknowledged by the Commission itself on numerous occasions.[314] The courts have accepted the validity of this principle as well.[315] We thus see no basis for

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[312] *Maine Yankee Atomic Power Co.* (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1013 (1973) (citation omitted).

[313] *See Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-262, 1 NRC 163, 196 n.54 (1975) ("Under the procedures of this agency, the analysis [in the final EIS] was put forward at a public, adjudicatory hearing and was fully tested. And Commission regulations not only contemplate that the ultimate NEPA judgments be made on the basis of the entire record before the adjudicatory tribunals but, as well, that the findings and conclusions of those tribunals be deemed to amend the [final EIS] (insofar as different therefrom)."); *see also Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 371 (1975).

[314] *See Crow Butte Resources, Inc.* (License Renewal for the In Situ Leach Facility, Crawford, Nebraska), CLI-19-5, 89 NRC 329, 330 (2019); *Ross,* CLI-16-13, 83 NRC at 595; *Entergy Nuclear Operations, Inc.* (Indian Point, Units 2 and 3), CLI-15-6, 81 NRC 340, 387-88 & n.255 (2015); *Hydro Resources, Inc.* ((P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 53 (2001); *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 29 n.43 (1978), *petitions for review denied sub nom. New England Coal. on Nuclear Pollution v. NRC,* 582 F.2d 87 (1st Cir. 1978); *see also Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 706-07 (1985); *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), ALAB-660, 14 NRC 987, 1014 (1981); *Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 785-86 (1979); *Allied-General Nuclear Services* (Barnwell Nuclear Fuel Plant Separations Facility), ALAB-296, 2 NRC 671, 680 (1975).

[315] *See Nat. Res. Def. Council,* 879 F.3d at 1209-12; *New England Coal.,* 582 F.2d at 94; *Citizens for Safe Power v. NRC,* 524 F.2d 1291, 1294 n.5 (D.C. Cir. 1975); *Ecology Action v. AEC,* 492 F.2d 998, 1001-02 (2d Cir. 1974).

The Oglala Sioux Tribe nonetheless maintains that one or both of the D.C. Circuit's recent decisions in *Oglala Sioux Tribe,* 896 F.3d at 529, and *Natural Resources Defense Council,* cited above, require that we abandon this long-standing agency precedent. *See* Oglala Sioux Tribe Evidentiary Hearing Response at 15; Oglala Sioux Tribe Response Statement at 33; Oglala Sioux Tribe Proposed Findings at 40. In our view, however, these two cases do not pose a procedural bar to the result reached here regarding supplementation.

Each of these rulings expressed concern about aspects of the agency's procedural approach of allowing a requested license to become effective despite the fact that the as-yet-to-be completed adjudicatory process had identified a NEPA deficiency that required correction. With the former case, the Oglala Sioux Tribe sought review of this Board's decision under the agency's rule, 10 C.F.R. § 2.1202(a), permitting the Staff-issued Powertech license to become effective while an

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declaring that an adjudicatory record developed by a licensing board regarding some aspect of an admitted challenge to the NRC Staff's environmental review process or documents cannot provide the basis for a board determination that modifies the NRC Staff's environmental determinations, including the issue of whether EIS supplementation is necessary.

It also has been recognized, however, that a NEPA deficiency identified in an adjudication can trigger the need to prepare an EIS supplement. Thus, mirroring the 10 C.F.R. Part 51 provision regarding EIS supplementation,[316] agency decisions have recognized supplementation may be required when "the absence of

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adjudicatory hearing on contested issues was pending based principally on a finding of no irreparable injury to the Tribe. In the latter case, the challenge was to a licensing board's ability to supplement a NEPA record on the basis of evidentiary hearing information when, pursuant to section 2.1202(a), an effective license had been issued. And in both instances, the focus of the court's concern mirrored that set forth in a dissent written by Commissioner Baran during Commission review of the licensing board decisions at issue questioning whether the agency could make a license effective when the adjudicatory process regarding the underlying application had not been completed. *See Oglala Sioux Tribe,* 896 F.3d at 526; *Nat. Res. Def. Council,* 879 F.3d at 1210. Both Commissioner Baran's dissents and the two judicial panel's decisions emphasized that the negative implications for the agency's NEPA process of allowing a license to become effective before the adjudicatory process is completed "are not idle concerns." *Nat. Res. Def. Council,* 879 F.3d at 1210; *see Oglala Sioux Tribe,* 896 F.3d at 532 (explaining that agency's practice of allowing licenses to issue while adjudicatory process is ongoing is "contrary to NEPA"); CLI-16-20, 84 NRC at 269 (Baran, C., dissenting in part) (taking the position that NEPA requires an adequate environmental record before an agency can consider issuing a license); *Ross,* CLI-16-13, 83 NRC at 604 (Baran, C., concurring in part and dissenting in part) (taking the position that an agency cannot supplement the NEPA record after the licensing action has been taken). Thus, to the degree they raise questions about a licensing board's ability to supplement a NEPA statement in an initial decision, they appear to do so based on the proposition that such supplementation is improper because the license is effective, rather than because it is done as part of the adjudicatory process.

In this instance, however, notwithstanding its finding that the agency improperly allowed the Powertech license to remain effective after concluding that a significant NEPA deficiency existed, without vacating that agency decision the D.C. Circuit's *Oglala Sioux Tribe* panel remanded the matter to the Commission to consider further, in line with the D.C. Circuit's *Allied Signal* precedent, whether and under what circumstances the Powertech license should remain effective. *See Oglala Sioux Tribe,* 896 F.2d at 538 (citing *Allied-Signal, Inc. v. NRC,* 998 F.2d 146, 150-51 (D.C. Cir. 1993)). In light of this judicial determination and the Commission's follow-on decision allowing the effectiveness of the Powertech license to remain intact, albeit subject to certain conditions, *see also* CLI-19-1, 89 NRC at 8-10, we do not consider either the *Oglala Sioux Tribe* or *Natural Resources Defense Council* cases as compelling, in and of themselves, supplementation of the NRC Staff's FSEIS outside the adjudicatory process, *id.* at 10-11.

[316] In pertinent part, 10 C.F.R. § 51.92 provides that "the NRC staff will prepare a supplement to a final [EIS] . . . if (1) [t]here are substantial changes in the proposed action that are relevant to environmental concerns; or (2) there are new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." In our estimation, the agency case law discussed *infra* provides some specific instances when information provided in the context of the adjudicatory process constitutes "new and significant circumstances or information."

discussion in [a final EIS] is so fundamental an omission as to call for recirculation of the [final EIS],"[317] or if "the proposed project has been so changed by the Board's decision as not to have been fairly exposed to public comments during the initial circulation of the [final EIS],"[318] or should the evidence presented by the NRC Staff at a hearing "depart so markedly from the positions espoused or information reflected in the [final EIS] as to require formal redrafting and recirculation for comment."[319]

Initially, we do not consider dispositive of this supplementation issue the language in section 1502.22 stating, as it would be applicable to this instance, that an explanation about the unavailability of any purported cultural resources information that is relevant to reasonably foreseeable adverse impacts arising from construction or other activities on the Dewey-Burdock site must be included "within the [EIS]." As the Commission pointed out in its recent order denying a request for interlocutory review of the Board's decision in LBP-18-5, "as an independent regulatory agency we are not bound by section 1502.22."[320] Given the longstanding agency precedent that the adjudicatory record of a licensing proceeding can serve to supplement or amend an NRC Staff environmental document, we conclude that an adjudicatory record, such as the one created in this instance, can serve that purpose in the appropriate circumstance.[321]

Thus, the Oglala Sioux Tribe's supplementation question here turns on the matter of whether, based on the adjudicatory record developed by the Board, there is sufficient grounds to require that, notwithstanding the information in the adjudicatory record, the NRC Staff must prepare a draft supplement to the Dewey-Burdock EIS, which would then be circulated for comment and published as a final environmental document for inclusion in the ROD for this

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[317] *Turkey Point,* ALAB-660, 14 NRC at 1014.

[318] *Black Fox,* ALAB-573, 10 NRC at 786.

[319] *Barnwell,* ALAB-296, 2 NRC at 680.

[320] CLI-19-9, 90 NRC at 135.

[321] In maintaining that such supplementation is required, a principal Oglala Sioux Tribe argument is that the NRC Staff's approach deprives the public of its opportunity for input on the matter of information unavailability in violation of the NEPA process. *See* Oglala Sioux Tribe Evidentiary Hearing Response at 17; Oglala Sioux Tribe Response Statement at 31. As an appeal board observed in responding to a similarly framed challenge to the propriety of allowing the adjudicatory record to be used to correct or supplement the NRC Staff's NEPA documents, the hearing process "arguably allows for additional and a more rigorous public scrutiny of the [final EIS] than does the usual 'circulation for comment.'" *Limerick,* ALAB-819, 22 NRC at 707. Certainly, it seems unlikely that any member of the public could pursue this matter in a manner that would be more effective than the intervenors, represented by counsel, or that this concern would receive more careful scrutiny than that which has been afforded by this Board in considering the intervenors' NEPA-based concerns.

proceeding.[322] In its 2015 partial initial decision, the Board determined that supplementation was required relative to Contention 1A because the NRC Staff's environmental documents "do not adequately address Sioux tribal cultural, historic, and religious resources" such that "the FSEIS and Record of Decision in this case must be supplemented, if necessary, to include any cultural, historic, or religious sites identified and to discuss any mitigation measures necessary to avoid any adverse effects."[323] Now, four years later, the issue is whether it is necessary to provide a supplement outlining the reasons why such additional cultural resources information still has not been obtained by the NRC Staff.

Although the concerns reflected in the agency's case law about the need for supplementation when a board's decision or the NRC Staff's evidentiary presentation are significantly different from the final EIS do not appear to be applicable here,[324] as was the case with the Board's 2015 partial initial decision, the importance of the purported missing information is a factor that warrants consideration as a basis for supplementation.[325] The NRC Staff's original FSEIS indicated that cultural resources information was not available because "the Oglala Sioux Tribe initially announced its intention to participate in the April [2013] survey, but withdrew its acceptance because the tribal council had not been briefed before the survey was scheduled to begin."[326] The FSEIS, however, contained no discussion about reasonable NRC Staff actions or exorbitant costs or unknown means of obtaining the information (along the lines of what we have outlined are the precepts embodied in section 1502.22)[327] to explain why the NRC Staff had not obtained this information that the intervenors (and subsequently the Board) clearly believed to be of importance to the completeness of its environmental impact analysis. Yet, the intervenors made no complaint

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[322] As the NRC Staff indicated during the evidentiary hearing, depending on the substantive information involved and the number and complexity of comments received, the supplementation process can require from three to six months to complete. *See* Tr. at 1804-05 (Aug. 28, 2019) (Diaz-Toro).

[323] LBP-15-16, 81 NRC at 708.

[324] *See supra* notes 314-15. We note that, while its explanation in support of its position regarding the lack of inclusion of cultural resources has changed somewhat based on the circumstances, the position the NRC Staff took relative to the original FSEIS and its current position regarding the inclusion of cultural resources are not fundamentally different, i.e., those cultural resources as they might be identified by the Oglala Sioux Tribe are not included because, despite the reasonable efforts of the NRC Staff to formulate a survey process that would comply with NEPA, the Tribe insisted that type of cultural resources survey protocol was not acceptable.

[325] *See supra* note 312.

[326] *See* Ex. NRC-008-B-2, FEIS at F-2. The other relevant portions of the Staff's FSEIS contain no discussion regarding the absence of the Oglala Sioux Tribe's input regarding cultural resources on the Powertech site. *See* Ex. NRC-008-A-1, FSEIS at xxxix-xl, 1-16 to -21, 3-72 to -82; Ex. NRC-008-A-2, FSEIS at 4-156 to -177, 5-45 to -49; Ex. NRC-008-B-2, FSEIS at F-1 to -30.

[327] *See supra* section IV.D.

then about the lack of such an accounting or the need to supplement the FSEIS to include such a discussion.[328]

The Oglala Sioux Tribe's relatively recent focus on the ancillary matter of how the environmental record of this proceeding should document why this information is unavailable thus does not appear to us to constitute the type of significant discussion that warrants employing the supplemental process, particularly when the adjudicatory process has been utilized to include that information in the record in a fair, meaningful, and effective manner.[329]

V. CONCLUSION AND BOARD ORDER

In support of its position regarding the failings in the NRC Staff process under NHPA and NEPA for carrying out the identification of the Oglala Sioux Tribe's cultural resources on the Powertech site, the Intervenors have sought to remind the Board of the respect for tribal sovereignty and the associated trust responsibility the federal government and its agencies owe to Native American tribes.[330] Those considerations are not, however, absolutes to the degree that they preclude a federal agency from taking action in the exercise of its NEPA responsibilities once a reasonable effort has been made to procure the cooperation

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[328] *See* Oglala Sioux Tribe's Statement of Position on Contentions (June 20, 2014) at 10-15; Consolidated Interveners' Opening Statement (June 26, 2014) at 2-4; Oglala Sioux Tribe's Rebuttal Statement (July 15, 2014) at 2-13; [Consolidated Interveners'] Rebuttal to Opening Statements of Applicant and NRC Staff (July 15, 2014) at unnumbered pp. 1-3; Oglala Sioux Tribe's Post-Hearing Initial Brief with Findings of Fact and Conclusions of Law (Jan. 9, 2015) at 12-25; Consolidated Intervenors' Proposed Findings of Fact and Conclusions of Law and Response to Post-hearing Order (Jan. 9, 2015) at 1-14; Oglala Sioux Tribe's Post-Hearing Reply Brief (Jan. 29, 2015) at 1-14; Consolidated Intervenor's Reply to Post-hearing Briefs (Jan. 29, 2015) at 1-12.

[329] *See Friends of the River v. FERC,* 720 F.2d 93, 106 (D.C. Cir. 1983) (declining to require remand to prepare additional EIS when pertinent information had already been incorporated into a publicly-accessible Commission opinion, given that to do so "would treat the EIS as 'an end in itself'" and would not meaningfully serve NEPA's goals); *cf. Dombeck,* 185 F.3d at 1172-73 (declaring participants' awareness through the environmental review process of the scarcity of lynx impact data was sufficient to excuse need for formal statement citing and parroting the regulatory language of section 1502.22(b)).

Of course, the NRC Staff is still responsible for whatever "supplementation" may be required to the agency's ROD to reflect the pertinent adjudicatory activities that have transpired since the NRC Staff's initial ROD for this proceeding was issued in 2014. *See* 10 C.F.R. § 51.102(c); *see also* Issuance of Materials License and [ROD] for Powertech (USA) Inc., Dewey-Burdock Facility, 79 Fed. Reg. 21,302 (Apr. 15, 2014).

[330] *See* Consolidated Intervenors Response Statement at 3-18; Oglala Sioux Tribe's Response in Opposition to NRC Staff Motion for Summary Disposition of Contentions 1A and 1B (Sept. 1, 2017) at 25-26.

and input from a tribe.[331] In this instance, we conclude that, although unsuccessful, the NRC Staff acted reasonably in seeking to obtain information from the Tribe regarding the location and significance of Tribal cultural resources on the Dewey-Burdock site for the purpose of its NEPA impacts analysis and, as such, we conclude that the NRC Staff has prevailed relative to Intervenors' Contention 1A.

Accordingly, the Atomic Safety and Licensing Board assigned to hear the contentions raised in this case rules as follows:

A. Contention 1A is *resolved* on the merits in favor of the NRC Staff. The Board finds that the NRC Staff has satisfied its NEPA obligation to take a reasonable hard look at potential impacts to Native American cultural resources by proposing and attempting to implement the March 2018 Approach. The Board finds that the information necessary to complete the NRC Staff's NEPA review is effectively unavailable, consistent with the CEQ guidelines in 40 C.F.R. § 1502.22. No further supplemental EIS is necessary in this case.

B. A new license condition provision is *incorporated* into PA Stipulation 13(c)(iii), as set forth in section IV.E *supra.*

C. Pursuant to 10 C.F.R. § 2.1207(a)(3)(iii) the Board, by separate order, is providing to the Commission's Secretary for inclusion in the agency's docket for this proceeding a copy of all proposed Board questions submitted by the parties prior to and during the course of the evidentiary hearing.

D. The proceeding before this Board is *terminated.*

E. In accordance with 10 C.F.R. § 2.1210, this Final Initial Decision will constitute a final decision of the Commission 120 days from the date of issuance (or the first agency business day following that date if it is a Saturday, Sunday, or federal holiday, *see* 10 C.F.R. § 2.306(a)), unless a petition for review is filed in accordance with 10 C.F.R. § 2.1212, or the Commission directs otherwise. Any party wishing to file a petition for review with the Commission regarding the Board's ruling

[331] *Cf. United Keetoowah Band of Cherokee Indians v. FCC,* 933 F.3d 728, 749 (D.C. Cir. 2019) (requiring agency to "make a reasonable and good faith effort to carry out appropriate identification efforts" relative to tribal cultural resources in the context of NHPA and NEPA review of impacts of small cell towers and ACHP regulations, if applicant seeking tribal cultural resources information to present to agency is "unable to agree on a fee [with the tribe], the applicant may seek other means to fulfill its obligation" (quoting 36 C.F.R. § 800.4(b)(1) and *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment* (Second Report & Order), FCC 18-30, 2018 WL 1559856, ¶ 125 (FCC Mar. 30, 2018))).

on the grounds specified in 10 C.F.R. § 2.341(b)(4) must do so within twenty-five (25) days after service of this Final Initial Decision. Within twenty-five (25) days after service of a petition for review, parties to the proceeding may file an answer supporting or opposing Commission review. Any petition for review and any answer shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

It is so ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

Dr. Mark O. Barnett
ADMINISTRATIVE JUDGE

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Rockville, Maryland
December 12, 2019