

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

POWERTECH (USA) INC.

(Dewey-Burdock
In Situ Uranium Recovery Facility)

Docket No. 40-9075-MLA

ASLBP No. 10-898-02-MLA-BD01

December 12, 2019

FINAL INITIAL DECISION

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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 now consider the

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-13-09, issued July 22, 2013, ruled on the admissibility of new and amended contentions. LBP-13-09, 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), pets. for rev. granted in part and denied in part, CLI-16-20, 84 NRC 219 (2016). LBP-17-09, issued October 19, 2017, granted summary disposition of Contention 1B and denied summary disposition as to Contention 1A. LBP-17-09, 86 NRC 167 (2017), pet. for rev. denied, CLI-18-07, 88 NRC 1 (2018). LBP-18-05, issued October 30, 2018, denied cross-motions for summary disposition as to Contention 1A. LBP-18-05, 88 NRC 95 (2018), pet. for rev. denied, CLI-19-09, 90 NRC ____ (Sept. 26, 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 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

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 1A

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).

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 petitions⁸ 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

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.

contentions.¹¹ Of these, the Board admitted nine, two of which concerned historic and cultural resources issues.¹² Then in March 2014, 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 migrated¹⁵ 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)

¹¹ See List of Contentions of the Oglala Sioux Tribe Based on the [DSEIS] (Jan. 25, 2013); Consolidated Intervenor’s 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 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 Res., Inc. (In Situ Leach Facility, Crawford, Neb.), 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

documenting the NEPA-review associated aspects of the NRC Staff's decision 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

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.

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).

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 Intervenor 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 Intervenor.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 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

²⁴ LBP-15-16, 81 NRC at 708–11.

²⁵ Id. at 708–10.

²⁶ Id. at 653.

²⁷ Id. at 655.

²⁸ Id.

²⁹ Id.

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 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

³⁰ Id. at 656–57.

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-17-09, 86 NRC at 179–80.

³³ See id.

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).

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-17-09, 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-17-09, 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

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-17-09, 86 NRC at 188–90.

⁴¹ Id. at 194.

to present to the other parties in the next several weeks.⁴² In line with this representation, on December 6, 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 Intervenor 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

⁴² Tr. at 1188–90 (Nov. 16, 2017).

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-18-05, 88 NRC at 108 n.73.

⁴⁷ Ex. NRC-193, Oglala Sioux Tribe January 19, 2018 Response at 1–2.

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 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

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].

⁵⁰ LBP-18-05, 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-19-09, 90 NRC at ___ (slip op. at 10).

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-18-05, 88 NRC at 110–13.

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:

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.”

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-18-05, 88 NRC at 119.

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 10m 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

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

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 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-18-05, 88 NRC at 120–21, without objection from the Oglala Sioux Tribe.

⁵⁶ Ex. NRC-198, Oglala Sioux Tribe Updated Methodology Proposal.

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-18-05, 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 concerned (1) the reasonableness of the methodology proposed by the NRC Staff and its contractor for the site survey component of the March 2018

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-18-05, 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-18-05, 88 NRC at 100.

⁶¹ Id.; see CLI-19-09, 90 NRC at ___ (slip op. at 10).

⁶² LBP-18-05, 88 NRC at 125.

⁶³ Id. at 130.

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-18-05, 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

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.

E. The NRC Staff's February 2019 Methodology

The NRC Staff elected to pursue the option of implementing the March 2018 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

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 & 2), CLI-04-06, 59 NRC 62 (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 (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.

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

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

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 1460–517 (Dec. 6, 2018); Tr. at 1518–54 (Jan. 29, 2019); Tr. at 1555–627 (Mar. 21, 2019); Tr. at 1628–73 (Apr. 23, 2019).

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.

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-18-05.⁸³ The NRC Staff explained that the 2019 Methodology "was a working document intended to facilitate discussion with the Tribes" and that the 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

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.

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].

accepted a rigid application of the March 2018 proposal.”⁸⁷ In its letter, the Oglala Sioux Tribe attempted to renegotiate the cost⁸⁸ and timeline⁸⁹ of the March 2018 Approach. The Tribe also raised NHPA issues that had previously been addressed and resolved in LBP-17-09.⁹⁰

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 evidentiary hearing.”⁹² The NRC Staff thus ceased further efforts to implement the March 2018 Approach and the February 2019 Methodology.

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).

⁹² Tr. at 1619–20 (Mar. 21, 2019).

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 witnesses⁹⁹ and twenty-two affidavits submitted by Consolidated Intervenors.¹⁰⁰ The NRC Staff filed a reply

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].

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 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-18-05.¹⁰⁴ 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

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].

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 Intervenor's failure to provide proposed findings is fatal to their ability to take an appeal from this Final Initial Decision will be a matter for

reply.¹⁰⁸ On October 18, the Oglala Sioux Tribe and the NRC Staff filed reply findings of fact and conclusions of law.¹⁰⁹

III. LEGAL STANDARDS

A. Legal Standards under the Atomic Energy Act (AEA)

The AEA and the Uranium Mill Tailings Radiation Control Act of 1978¹¹⁰ 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

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].

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.

use source and byproduct material in connection with the Dewey-Burdock project.¹¹² This license has since remained in place despite legal challenges.¹¹³

B. Legal Standards under the National Environmental Policy Act (NEPA)

Contention 1A raises challenges to the NRC Staff's compliance with NEPA¹¹⁴ 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,

¹¹² Ex. NRC-012, Powertech License; see also ADAMS Accession Package Number ML14043A052, 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-19-01, 89 NRC ___, ___ (slip op. at 13) (2019).

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).

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 conceivable aspect of a proposed project.¹²⁷ NEPA thus gives agencies broad discretion to keep their inquiries within appropriate and manageable

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.

¹²⁷ Private Fuel Storage, L.L.C. (Indep. Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002).

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

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 County, Inc. v. Aldridge, 855 F.2d 1380, 1385 (9th Cir. 1988)); see also S. Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-09-07, 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. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287, 315 (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 Project), LBP-15-3, 81 NRC 65, 82 (2015), aff’d, CLI-16-13, 83 NRC 566 (2016) (citations omitted), pet. for rev. denied sub nom. Nat. Res. Def. Council v. NRC, 879 F.3d 1202 (D.C. Cir. 2018); see also Pac. Gas & Elec. 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

The 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.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

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).

¹³³ 40 C.F.R. § 1502.22.

¹³⁴ Id.

¹³⁵ Id. § 1502.22(a).

¹³⁶ Id. § 1502.22(b).

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 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

¹³⁷ Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1172–73 (10th Cir. 1999).

¹³⁸ Pac. Gas & Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 & 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)).

¹³⁹ See CLI-19-09, 90 NRC at ___ (slip op. at 18); Diablo Canyon, CLI-11-11, 74 NRC at 443–44; North Anna ESP, CLI-07-27, 66 NRC at 235–36 & n.115; Pac. Gas & Elec. Co. (Diablo Canyon Power Plant Indep. Spent Fuel Storage Installation), CLI-08-01, 67 NRC 1, 12 (2008).

¹⁴⁰ CLI-19-09, 90 NRC at ___ (slip op. at 18).

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).

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 NRC Staff has unduly ignored or minimized pertinent environmental effects."¹⁴⁶

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

¹⁴³ 10 C.F.R. § 2.325.

¹⁴⁴ See Progress Energy Fla., Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-02, 71 NRC 27, 34 (2010); see also S. 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 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 431 (2003).

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.

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.

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.

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-17-09, 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-17-09 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-18-05, 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,

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-18-05, 88 NRC at 112–19.

training, and cultural knowledge to carry out and facilitate the survey” is required to satisfy the NRC Staff’s NEPA obligations.¹⁵⁶ 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

¹⁵⁶ Ex. NRC-190, Oglala Sioux Tribe May 31, 2017 Letter at 4. That being said, at least initially 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-16-07, 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.

the March 2018 Approach to Sanford Cohen and Associates (SC&A).¹⁶³ Under the SC&A contract, Dr. Nickens began assisting 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

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 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.").

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 vitae¹⁶⁹ and testimony at the 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

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.

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).

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 facilitator role that Mr. Spangler was to occupy, nor would the need for such tribal input as part of the survey process disqualify Mr.

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.

Spangler from fulfilling the facilitator role for which he was retained by the NRC Staff.¹⁷⁶

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 281281, 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 Tribe's actions relative to the March 2018 Approach and the February 2019 Methodology, see infra sections IV.B–IV.C, both

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

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.

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

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

¹⁸¹ See LBP-18-05, 88 NRC at 114.

¹⁸² Ex. NRC-218, Oglala Sioux Tribe February 22, 2019 Meeting Summary at PDF 2.

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.

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 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

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-18-05, 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].

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.

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 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

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.

¹⁹⁵ Ex. NRC-192, March 2018 Approach at 4.

¹⁹⁶ Id.

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-18-05, 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

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-18-05, 88 NRC at 130–31.

²⁰² Id. at 116–17.

totally responsible for providing all the data and the analysis with no set protocol or methodology.”²⁰³ The Oglala Sioux 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-18-05, 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

²⁰³ Tr. at 1431 (Apr. 6, 2018).

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-18-05, 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-19-09, 90 NRC at ___ (slip op. at 11).

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 definitions and field identifications of Dr. Sebastian LeBeau's Lakota-specific work,²⁰⁹ which the Oglala Sioux Tribe expressly requested be given consideration by the NRC Staff,²¹⁰ but then subsequently criticized when it was incorporated.²¹¹ NRC Staff contractor Jerry Spangler also

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," *Environmental Science and Policy* 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, 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

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 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

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).

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

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 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

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.

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

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 time-line 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, in collaboration with tribal

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).

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 timeframes 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

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; Ex. 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-18-05, 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).

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 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

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.”).

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-16-07, 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

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-18-05 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 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

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-18-05, 88 NRC at 111–12; see CLI-19-09, 90 NRC at __ (slip op. at 10).

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.

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 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

²³⁵ Ex. NRC-176-R, NRC Staff Direct Testimony at 18–19 (Diaz-Toro); see also LBP-18-05, 88 NRC at 119–22.

²³⁶ See LBP-18-05, 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, 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).

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

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.

archaeological 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-18-05 and in sections II.D and IV.A supra.

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.

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 construction 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

²⁴⁶ See Ex. NRC-176-R, NRC Staff Direct Testimony at 18 (Diaz-Toro); Ex. NRC-192, March 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.

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 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

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, 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 10m 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

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 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

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.

²⁵⁵ Ex. NRC-219, Oglala Sioux Tribe March 30, 2018 Response at 1.

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 environmental 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

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.”).

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).

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-17-09, 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

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-19-09, 90 NRC at ___ (slip op. at 18).

²⁶⁵ LBP-17-09, 86 NRC at 200.

²⁶⁶ Id.

In LBP-18-05, 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 is unknown,”²⁶⁹ bearing in mind that “the term ‘overall costs’ encompasses financial

²⁶⁷ LBP-18-05, 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).

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, 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

²⁷⁰ CEQ Incomplete/Unavailable Information Regulations, 51 Fed. Reg. at 15,622.

²⁷¹ CLI-19-09, 90 NRC at ___ (slip op. at 19).

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

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 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

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.

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.

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

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

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 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, 2019), 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).

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 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

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.

²⁸³ Tr. at 2042 (Aug. 29, 2019).

²⁸⁴ NRC-018-A, Programmatic Agreement at 13.

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:

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 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

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-18-05, 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 the circumstances, the NRC Staff has satisfied the hard look requirement under NEPA.

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-18-05, 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

The NRC Staff's actions taken after the issuance of both LBP-17-09 and LBP-18-05 show a diligent effort to fulfill its NEPA "hard look" obligation. Relative to the NRC Staff's activities after LBP-17-09, in the face of a Board ruling that there remained material factual

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 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.

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-18-05 activities, despite the availability of the Board-proffered option to proceed directly 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

²⁹¹ See supra notes 51, 218–20 and accompanying text.

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.

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-17-09 and LBP-18-05, 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 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

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-18-05, 88 NRC at 105–09, 119; Ex. NRC-176-R, NRC Staff Direct Testimony at 24 (Diaz-Toro).

²⁹⁸ See supra note 217; LBP-18-05, 88 NRC at 108, 136; Tr. at 1922–23 (Aug. 28, 2019) (Diaz-Toro); Tr. at 46 (Aug. 29, 2019 closed session) (Diaz-Toro).

²⁹⁹ See supra notes 14, 238.

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 gathered 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

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.

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.

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

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.

why information relevant to reasonably foreseeable adverse 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

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.

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 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

³¹¹ Calvert Cliffs' Coordinating Comm., Inc. v. AEC, 449 F.2d 1109, 1114 (D.C. Cir. 1971), cert. denied, 404 U.S. 942 (1972).

³¹² Me. Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1013 (1973) (citation omitted).

³¹³ See Phila. Elec. Co. (Limerick Generation 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).

on numerous occasions.³¹⁴ The courts have accepted the validity of this principle as well.³¹⁵

We thus see no basis for declaring that an adjudicatory record developed by a licensing board

³¹⁴ See Crow Butte Res., Inc. (Crawford, Nebraska Facility), CLI-19-05, 89 NRC __, __–__ (slip op. at 1–2) (May 30, 2019); Ross, CLI-16-13, 83 NRC at 595; Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3), CLI-15-06, 81 NRC 340, 387–88 & n.255 (2015); Hydro Res., Inc. (Rio Rancho, NM), CLI-01-04, 53 NRC 31, 53 (2001); La. Energy Servs., L.P. (Claiborne Enrichment Center), CLI-98-03, 47 NRC 77, 89 (1998); Pub. Serv. Co. of N.H. (Seabrook Stations, Units 1 and 2), CLI-78-01, 7 NRC 1, 29 n.43 (1978), pets. for rev. denied sub nom. New England Coal. on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978); see also Phila. Elec. Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 706–07 (1985); Fla. Power & Light Co. (Turkey Point Nuclear Generating, Unit Nos. 3 and 4), ALAB-660, 14 NRC 987, 1014 (1981); Pub. Serv. Co. of Okla. (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 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

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 discussion in an [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

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-19-01, 89 NRC at __–__ (slip op. at 10–12), 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 __–__ (slip op. at 12–13).

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."

³¹⁷ Turkey Point, ALAB-660, 14 NRC at 1014.

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-18-05, “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

³¹⁸ Black Fox, ALAB-573, 10 NRC at 786.

³¹⁹ Barnwell, ALAB-296, 2 NRC at 680.

³²⁰ CLI-19-09, 90 NRC at __ (slip op. at 18).

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.

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 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

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.

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 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

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-xi, 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.

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 Interveners' 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.

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 Intervenor has 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 and input from a tribe.³³¹ In this instance, we conclude that, although unsuccessful, the NRC Staff acted

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 Intervenor 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.

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 ACPH 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))).

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 Intervenor's 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
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Commission regarding the Board's ruling 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

/RA/

William J. Froehlich, Chairman
ADMINISTRATIVE JUDGE

/RA/

Dr. Mark O. Barnett
ADMINISTRATIVE JUDGE

/RA/

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

Rockville, Maryland

December 12, 2019

POWERTECH (USA) INC., DEWEY-BURDOCK IN SITU RECOVERY FACILITY
DOCKET NO. 40-9075-MLA
FINAL INITIAL DECISION (LBP-19-10)

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[Original signed by Clara Sola _____]
Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 12TH day of December 2019.