[ORAL ARGUMENT NOT YET SCHEDULED]

No. 20-1489

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

OGLALA SIOUX TRIBE and ALIGNING FOR RESPONSIBLE MINING,

Petitioners,

v.

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

Respondents,

and POWERTECH (USA), INC.,

Intervenor.

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

INITIAL OPENING BRIEF OF PETITIONERS OGLALA SIOUX TRIBE and ALIGNING FOR RESPONSIBLE MINING

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CERTIFICATE AS TO PARTIES, RULINGS AND RELATED CASES AND RULE 26.1 DISCLOSURE

Pursuant to D.C. Circuit Rules 15(c)(3), 26.1 and 28(a)(1), 32 counsel for Petitioners certifies as follows:

1. Parties, Intervenors, and Amici Curiae

The parties to this Petition for Review are Petitioners Oglala Sioux Tribe and Aligning for Responsible Mining; Respondents United States Nuclear Regulatory Commission ("NRC" or "Commission") and the United States of America; and Intervenor Powertech (USA), Inc. There are no Amici.

RULE 26.1 DISCLOSURE STATEMENT

Petitioner Oglala Sioux Tribe is a sovereign government. It has no parent corporations and issues no stock or shares. Aligning for Responsible Mining is an Oglala Sioux Tribe nonprofit association. It has no parent corporations and issues no stock or shares.

2. Rulings Under Review

Petitioners seek review of the following Nuclear Regulatory Commission final orders:

December 23, 2016 Memorandum and Order in *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Docket No. 40-9075-MLA, CLI-16-20, 84 NRC 219 (December 23, 2016)(JA__), which in turn

affirmed several decisions of the Atomic Safety Licensing Board and NRC Staff – *e.g.*, *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Uranium Recovery Facility), LPB-10-16, 72 NRC 361 (2010)(JA__); *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Uranium Recovery Facility), LBP-13-9, 78 NRC 37 (2013)(JA__); *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Uranium Recovery Facility), LBP-14-5, 79 NRC 377 (2014)(JA__); *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Recovery Facility), Order Removing Temporary Stay and Denying Motions for Stay of Materials License Number SUA-1600) (May 20, 2014)(JA__); *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Uranium Recovery Facility), LBP-15-16, 81 NRC 618 (2015)(JA__);

July 24, 2018 Memorandum and Order in *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Docket No. 40-9075-MLA, CLI-18-07, 88 NRC 1 (July 24, 2018)(JA__);

January 1, 2019 Memorandum and Order in *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Docket No. 40-9075-MLA, CLI-19-1, 89 NRC 1 (January 1, 2019)(JA__);

September 26, 2019 Memorandum and Order in *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Docket No. 40-9075-MLA, CLI-19-9, 90 NRC 121 (September 26, 2019)(JA__);

October 8, 2020 Memorandum and Order in *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In Situ Uranium Recovery Facility), Docket No. 40-9075-MLA, CLI-20-09 (October 8, 2020)(JA__), which affirmed *In the Matter of Powertech (USA), Inc.* (Dewey-Burdock In-Situ Uranium Recovery Facility), LPB-19-10, 90 NRC 287 (2019)(JA__);

Further, Petitioners seek review of the Commission's January, 2014 Final Supplemental Environmental Impact Statement ("FSEIS") for the Dewey-Burdock In-Situ Recovery Project in Custer and Fall River Counties, South Dakota, as amended(JA__)(excerpts); the April 8, 2014 Record of Decision ("ROD") for the project(JA__); and the April 8, 2014 Materials License No. SUA-1600, Docket No. 040-09075, as amended (JA__).

3. Related Cases

The challenged NRC license, FSEIS, and ROD were previously challenged in this Court in *Oglala Sioux Tribe v. NRC, et al.*, 896 F.3d 520 (D.C. Cir. 2018). Similar issues are presented for review in *Oglala Sioux Tribe v. U.S. EPA*, Case No. 21-1167, pending before the United States Court of Appeals for the 8th Circuit challenging an aquifer exemption granted by U.S. EPA under the federal Safe Drinking Water Act for the Dewey-Burdock ISL project. By Order of the 8th Circuit dated March 9, 2021, that case has been held in abeyance "pending the resolution of a parallel proceeding currently pending before the Environmental

Protection Agency's Environmental Appeals Board in *In re Powertech (USA), Inc.*, UIC Appeal No. 20-021."

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TABLE OF AUTHORITIES

Federal Caselaw

Federal Statutes

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Other Regulatory Authority

GLOSSARY

ACHP	Advisory Council on Historic Preservation
AEA/UMTRCA	Atomic Energy Act/Uranium Mill Tailings Radiation Control Act
APA	Administrative Procedure Act
FSEIS	Final Supplemental Environmental Impact Statement
NRC	Nuclear Regulatory Commission
NRC Staff	Nuclear Regulatory Commission Staff
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
Powertech	Powertech (USA), Inc.
ROD	Record of Decision

STATEMENT OF JURISDICTION

Jurisdiction in the Court of Appeals is proper under the Hobbs Act (28 U.S.C. §§ 2342(4), 2344; 42 U.S.C. § 2239(a)(1)(A), (b)(1)) based on the following Nuclear Regulatory Commission's ("NRC" or "Commission") "final orders": CLI-16-20, 84 NRC 219 (Dec. 23, 2016)(JA___), CLI-18-07, 88 NRC 1 (July 24, 2018)(JA__), CLI-19-1, 89 NRC 1 (Jan. 21, 2019)(JA__), CLI-19-9, 90 NRC 121 (Sept. 26, 2019)(JA__), and CLI-20-09, __ NRC __ (Oct. 8, 2020)(JA__).

CLI-16-20 affirmed legal violations in NRC Staff's review of cultural resource impacts under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321, *et seq.*, and in NRC Staff's review of impacts and consultation under the National Historic Preservation Act ("NHPA"). 54 U.S.C. §§ 300101, *et seq.* CLI-16-20 also rejected the Tribe's challenges to several aspects of the NRC Staff's NEPA compliance related to the analysis of environmental impacts of and mitigation proposals for the Project.

Subsequent Commission Orders allowed the license to remain in place without conducting the cultural resources survey required to satisfy the NEPA and NHPA requirements. These Orders purported to supplement and amend the Final Supplemental Environmental Impact Statement ("FSEIS") for the Project despite

the lack of any public involvement or government-to-government consultation with the Oglala Sioux Tribe ("Tribe").

The Petition for Review challenges the Commission's decisions that uphold the 2014 FSEIS(JA__)(excerpts) and Record of Decision ("ROD")(JA__) for the Dewey-Burdock Project, as well as the April 8, 2014 License (No. SUA-1600)(JA__) pursuant to 42 U.S.C. § 2239(b), 28 U.S.C. § 2342(4), 5 U.S.C. § 702, and Federal Appellate Rule 15. This Petition was timely filed on December 4, 2020. See 28 U.S.C. § 2344.

STATEMENT OF ISSUES

1. Whether the Commission erred in affirming an effective license, record of decision, and final environmental impact statement that failed to adequately assess impacts to cultural and historic resources required by NEPA and related laws.

2. Whether the Commission failed to satisfy the substantive and procedural duties, including government-to-government consultation, required by the NHPA and related laws.

3. Whether the Commission erroneously created *ad hoc* exemptions to NEPA, the Uranium Mill Tailings Radiation Control Act of 1978 ("UMTRCA"), and implementing regulations applicable to storage, transport, and disposal of radioactive uranium processing wastes.

4. Whether the Commission erroneously relied on incomplete analyses of impacts of geologic faults and the thousands of abandoned boreholes on ground water quality, despite pre-licensing duties imposed by NEPA, UMTRCA, and related laws.

5. Whether the Commission erred in affirming agency licensing actions that failed to adequately assess baseline water quality conditions by deferring analysis and data collection to post-licensing procedures contrary to NEPA and UMTRCA.

6. Whether the Commission erred in affirming agency licensing actions that lacked an adequate analysis of mitigation measure and their effectiveness for impacts to the cultural, historical, and religious sites of the Tribe as well as other impacts to the environment, as required by NEPA and related laws.

7. Whether the Commission unlawfully disallowed administrative adjudication of genuine issues raised by well-pled contentions.

8. Whether the Commission holding that UMTRCA licensing is not required to comply with the Council of Environmental Quality's NEPA procedural regulations is contrary to law.

STATUTES AND REGULATIONS

The Addendum contains pertinent provisions of the statute and regulations for the Atomic Energy Act/Uranium Mill Tailings Radiation Control Act, 42 U.S.C. §§ 2011, *et seq.*, NHPA, 54 U.S.C. §§ 300101, *et seq.*, and NEPA, 42 U.S.C. §§ 4321, *et seq.*

STATEMENT OF THE CASE

This case concerns the proposed Dewey-Burdock in situ leach uranium extraction project in the Black Hills of South Dakota. The project lands are within the traditional aboriginal territory of the Tribe and included in the 1851 Fort Laramie Treaty and the 1868 Fort Laramie Treaty (15 Stat., 635). The Project area is known to contain a significant but as-yet undetermined number of cultural, historic, and archaeological resources, including burial sites. FSEIS at 3-76 to 3-83 (JA__). NRC Staff and the applicant failed to conduct a competent cultural resources survey of the site, denying Petitioners the NEPA/NHPA-mandated opportunities to meaningfully participate in the assessment or determination of the significance of the identified sites, the impacts from the Project, development of mitigation measures that might be employed, or to identify additional cultural sites that warrant evaluation.

The Tribe owns lands near the proposed project, leased for domestic, agricultural, water development, conservation, and other purposes. The Tribe

derives benefit and value, economically and otherwise, from its lands, and has a strong interest in ensuring that these lands, and surface and ground waters, remain in an unpolluted state.

Throughout the administrative process, Petitioners sought to address the lack of compliance with NEPA, the NHPA, and NRC regulations regarding protection of the Tribe's cultural and historic resources, and the lack of information necessary to determine the hydrogeology and geochemistry of the site and therefore protect groundwater from contamination. The license was issued without a defensible baseline ground water characterization or a completed review of natural and manmade hydrological interconnections that pose a serious threat of allowing toxic mining fluids to cross-contaminate local aquifers.

The proposed in-situ method extracts uranium directly from the local aquifers using a process that injects oxidized liquids ("lixiviant") into the aquifer containing uranium deposits. The lixiviant is pumped under pressure through the aquifer's ore zone, and the uranium and other heavy metals dissolve into the lixiviant-altered aquifer. The now-toxic, metal-bearing, groundwater/lixiviant solution is then pumped back to the surface, where the uranium is separated out, processed into "yellowcake," and shipped to other facilities for further processing into nuclear fuel. After the uranium is removed, a portion of the spent-lixiviant is

recharged with oxygen and carbon dioxide and re-injected until the in-situ cycle can no longer economically extract uranium.

NRC licensing of in-situ facilities in the United States has not accurately predicted groundwater dynamics, resulting in horizontal or vertical leakage (called "excursions") and the inability to restore ground water to pre-license conditions. Groundwater contamination has occurred despite the repeated assurances by applicants that in-situ uranium extraction is safe and even benign.

The U.S. Geological Survey has confirmed that "[t]o date, no remediation of an [in-situ] operation in the United States has successfully returned the aquifer to baseline conditions." Otton, J.K., Hall, S., *In-situ recovery uranium mining in the United States: Overview of production and remediation issues* (Abstract), U.S. Geological Survey, 2009, IAEA-CN-175/87ISL (JA__). The report states that "[o]ften at the end of monitoring, contaminants continue to increase by reoxidation and resolubilization of species reduced during remediation; slow contaminant movement from low to high permeability zones; and slow desorption of contaminants adsorbed to various mineral phases." Id., see also Hall, Susan, *Groundwater Restoration at Uranium In-Situ Recovery Mines, South Texas Coastal Plain*, U.S.G.S. Open-File Report 2009–1143 (2009) at 30 (JA__).

In-situ projects cannot take place without an UMTRCA license. Instead of promulgating in-situ-specific regulations, NRC Staff applies some of the

UMTRCA regulations adopted in the 1980s to regulate conventional uranium extraction at conventional mill. NRC Staff routinely allows for weakened ground water restoration standards away from baseline water quality. Thus, the available evidence shows that NRC's *ad hoc* approach to licensing in-situ uranium extraction has degraded ground water quality over the long-term. See 3/3/2010 EPA Letter to Chief, Rulemaking and Directives Branch, NRC (citing NRC's failure to "evaluate the potential effects that non-attainment of baseline groundwater restoration would have on surrounding [underground sources of drinking water].")(JA__).

The FSEIS prepared for the Dewey-Burdock project circumvented the required NEPA analysis of these long-standing problems, deferring them to post-licensing inquiries. The Commission approved an in-situ licensing process that excluded critically important NEPA scoping process and determinations, neglected to analyze impacts from the creation, transportation and disposal of radioactive wastes, deferred the collection of defensible baseline data and demonstrations of the ability to contain groundwater contamination until future non-NEPA processes, and failed to provide the required detail for environmental impact mitigation.

Despite the significant, but largely unidentified, cultural and historic resources at the site, NRC abandoned all efforts to conduct a competent cultural resources survey. Instead, the Commission deemed the information "unavailable"

without the benefit of the NEPA-prescribed public process. The result is a license that is contrary to law and a decisionmaking process that deprived the Tribe and the public of the benefit of binding NEPA and NHPA procedures.

A. Procedural History

1. Powertech's License Application

Powertech submitted a combined source material and uranium processing license application on August 10, 2009, after its first application was rejected as incomplete. On January 5, 2010, NRC Staff issued a notice providing interested and affected parties an opportunity to request a hearing on the application. 75 Fed.Reg. 467. On March 8 and 9, 2010, multiple local affected citizens petitioned to intervene in the NRC licensing proceedings raising multiple legal and factual issues (called "contentions"). On March 18, 2010, NRC established an Atomic Safety and Licensing Board ("Board") panel to preside over the licensing process. 75 Fed.Reg. 13141.

On April 6 and 8, 2010, respectively, the Tribe and Aligning for Responsible Mining timely petitioned to intervene and presented multiple contentions. On August 5, 2010, Board Order LBP-10-16 (72 NRC 361), granted both petitions to intervene and found some, but not all, of the proffered contentions admissible over the objections of NRC Staff and Powertech (JA__). The Order admitted contentions alleging that the still-incomplete application prevented compliance

with UMTRCA, NEPA and NHPA: impacts to historic and cultural resources (Contentions 1A and 1B), protection of groundwater quality (Contention 2), establishment of baseline hydrogeologic conditions (Contention 3), and assessment of groundwater quantity impacts (Contention 4).

2. NRC Staff NEPA Process and Board Proceedings

NRC Staff did not conduct NEPA scoping. CLI-16-20, 84 NRC at 234-237 (JA__). On November 26, 2012, NRC released the Draft SEIS for the Dewey-Burdock Project for public comment. 77 Fed.Reg. 70486. On January 10, 2013, Petitioners submitted timely comments on the Draft SEIS and on January 25, 2013, the Tribe filed timely requests to admit several new or amended contentions in the licensing proceeding.

On July 22, 2013, Board Order LBP-13-9 (78 NRC 37) granted the admission of three new NEPA-based contentions to the proceeding, over the objections of NRC Staff and Powertech (JA__). The Order admitted the Tribe's contentions regarding: NEPA mitigation measures (Contention 6), connected actions (Contention 9), and Endangered Species Act consultation (Contentions 14A/B). The Order declined review of challenges to NRC's failure to analyze creation and disposal of radioactive waste (known as "11e2 byproduct material") (Contention 7) and failure to conduct NEPA scoping procedures (Contention 8).

On January 29, 2014, NRC released the Final SEIS for public comment. 79 Fed.Reg. 5468. Petitioners submitted a request to admit new and amended contentions and on April 28, 2014, Board Order LBP-14-5 (79 NRC 377) allowed the previously admitted contentions to "migrate" from the DSEIS contentions (JA__). Contentions 7 and 8 were refiled and were again dismissed.

On April 8, 2014, before the Board ruled on the contentions, NRC Staff issued NRC License No. SUA-1600 based on a ROD released the same day. Included in the ROD was a Programmatic Agreement, which NRC Staff asserted was the culmination of its NHPA process (JA__). The Programmatic Agreement purported to resolve all issues related to the NHPA contentions by deferring identification, evaluation, and mitigation of impacted cultural and historic resources until after licensing, and during construction and operation. No Tribe signed the Programmatic Agreement.

On April 14, 2014, the Tribe submitted a Motion to Stay the Effectiveness of Powertech's license. On May 20, 2014, the Board denied the stay (JA__).

Extensive motions practice and briefing preceded the August 19-21, 2014 Board evidentiary hearing in Rapid City, South Dakota. The Board heard testimony from each of the parties' expert witnesses and conducted cross examination but did not allow counsel to ask direct or cross-examination questions of any witness.

At the conclusion of the hearing, the Board granted the Tribe's motion seeking to compel Powertech to disclose withheld borehole log data. By December 9, 2014, the parties submitted supplemental testimony and exhibits regarding the post-hearing data disclosures. By January 29, 2015, all parties had submitted final merits briefs and responses.

3. Board Ruling and Petitions for Commission Review

On April 30, 2015, Board Order LBP-15-16 (81 NRC 618) found NEPA and NHPA violations, including failure to competently review the environmental impacts to Sioux cultural resources – largely because no competent survey had been conducted – yet left the license in place (JA__).

On May 26, 2015, each party filed a petition for Commission review. On December 23, 2016, the three sitting members of the Commission denied all petitions. CLI-16-20 (84 NRC 219)(JA__). The Commission was split, with Commissioner Baran dissenting on the decision to leave the license in place, despite confirmed NEPA and NHPA violations. Commissioner Svinicki dissented on upholding NEPA and NHPA violations.

4. *Oglala Sioux Tribe v. NRC*, 896 F.3d 520 (D.C. Cir. 2018)

On February 17, 2017, the Oglala Sioux Tribe filed a Petition for Review in this Court of many of the same issues presented herein. On July 20, 2018, this Court unanimously ruled that the Commission unlawfully required the Tribe to

show irreparable harm to stay or invalidate a license, despite ongoing NEPA violations. *OST*, 896 F.3d at 539. The Court deferred ruling on the other aspects of the Tribe's Petition, "grant[ing] the petition for review in part and remand[ing] the case to the Commission for further proceedings consistent with th[e] opinion." Id. at 539.

5. Remand and Subsequent Administrative Proceedings

On remand, and after briefing from the parties, Commission Order CLI-19-1 (89 NRC 1) upheld the license despite adjudicated cultural resources NEPA violations, based largely on the lack of immediate harm to the Tribe's interests due to the lack of other required permits (JA__). The Commission did not revisit other contentions on remand to ensure compliance with the Court's opinion. *OST*, 896 F.3d at 539.

In 2018, NRC Staff began its attempt to design and conduct a competent survey of cultural resources impacted by the proposal. These efforts failed when NRC Staff unilaterally abandoned the effort entirely and simply claimed the cultural resources information was "unavailable" in its view under 40 C.F.R. § 1502.22. Over Petitioners' objections, on December 12, 2019 Board Order LBP-19-10 (90 NRC 287) excused NRC Staff's failure to conduct any cultural resources survey (JA__). Commission Order CLI-20-09, with dissent from

Commissioner Baran, affirmed the Board on October 8, 2020, ending all administrative proceedings (JA__).

B. NEPA Requirements

NEPA is an action-forcing statute imposing sweeping procedural duties on all federal agencies to "prevent or eliminate damage to the environment and biosphere by focusing government and public attention on the environmental effects of proposed agency action." *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989). NEPA requires "that the agency will inform the public that it has indeed considered environmental concerns in its decision-making process." *Baltimore Gas and Electric Company v. NRDC*, 462 U.S. 87, 97 (1983). NEPA-compliant documents disclose and take a "hard look" at the foreseeable environmental consequences of the proposal and inform the agency decisionmaking. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

Pursuant to Council on Environmental Quality ("CEQ") regulations applicable to all federal agencies, "NEPA procedures must ensure that environmental information is available to public officials and citizens **before** decisions are made and **before** actions are taken." 40 C.F.R. § 1500.1(b)(emphasis added). The CEQ regulations apply to NRC decisionmaking. 42 U.S.C. § 4332(2)(C) *cited by New York v. NRC*, 681 F.3d 471, 476 (D.C. Cir. 2012); *OST*, 896 F.3d at 529.

CEQ regulations require that an EIS: (1) "include appropriate mitigation measures not already included in the proposed action or alternatives," 40 C.F.R. § 1502.14(f); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(f))." 40 C.F.R. § 1502.16(h). *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989), *accord New York*, 681 F.3d at 476.

CEQ regulations require agencies to "insure the professional integrity, including scientific integrity of the discussions and analysis…." 40 C.F.R. § 1502.24. Where relevant data is not presented in the NEPA document, a detailed justification for the decision not to collect the data must be "included within the environmental impact statement." 40 C.F.R. § 1502.22(b). Such NEPA documents must be subject to the public comment and review requirements. See *Massachusetts v. Watt*, 716 F.2d 946, 951 (1st Cir. 1983)("[U]nless a document has been publicly circulated and available for public comment, it does not satisfy NEPA's EIS requirements.").

C. NHPA Standards

Federal courts have summarized the strict mandates of the NHPA:

> Under the NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties, 36 C.F.R. § 800.4(b); determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found, 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a); determine whether the effect will be adverse, 36 C.F.R. §§

> 800.5(c), 800.9(b); and avoid or mitigate any adverse effects, 36 C.F.R. §§ 800.8[c], 800.9(c)**.** The [federal agency] must confer with the State Historic Preservation Officer ("SHPO") and seek the approval of the Advisory Council on Historic Preservation ("Council").

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 805 (9th Cir. 1999), see also 36 C.F.R. § 800.8(c)(1)(v)(agency must "[d]evelop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the [NEPA document].")

The substantive and procedural mandates of NHPA § 106 ("Section 106") require federal agencies, prior to approving any "undertaking," such as this Project, to "take into account the effect of the undertaking" on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register. 54 U.S.C. § 306108. Section 106 applies to properties already listed in the National Register, as well as those properties that may be eligible for listing. See *Pueblo of Sandia v. United States*, 50 F.3d 856, 859 (10th Cir. 1995).

Section 106 imposes procedural duties on NRC licensing actions to ensure the agency plays an important role in preserving, restoring, and maintaining the historic and cultural foundations of the nation. NRC must consult with any "Indian tribe […] that attaches religious and cultural significance" to the sites. 54 U.S.C. § 302706(b). Consultation must provide tribes "a reasonable opportunity to," 1) identify concerns; 2) "advise on the identification and evaluation of historic

properties, including those of traditional religious and cultural importance;" 3) provide input regarding impacts; and, 4) "participate in the resolution of adverse effects." 36 C.F.R. § 800.2(c)(2)(ii).

NHPA and NEPA impose distinct but closely related sets of duties on federal agencies when addressing cultural resources. *OST*, 896 F.3d at 526. "The agency official shall ensure that the section 106 process is initiated early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking." 36 C.F.R. § 800.1(c) (emphasis added). Early federal agency engagement with the Tribe is an issue of respect for tribal sovereignty. ACHP, Consultation Handbook (November 2008), at 3, 7, 12, and 29 (JA__).

To ensure federal agencies respect tribal sovereignty, NHPA requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government and Indian tribes." 36 C.F.R. § 800.2(c)(2)(ii)(C).[1] All federal agencies must fully implement the federal government's trust responsibility. See *Nance v. EPA*, 645 F.2d 701, 711 (9th Cir.

[1]See also Presidential Executive Memorandum entitled "Government-to-Government Relations with Native American Tribal Governments" (April 29, 1994), 59 Fed. Reg. 22951, and Presidential Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), 61 Fed. Reg. 26771.

1981)("any Federal Government action is subject to the United States' fiduciary responsibilities toward the Indian tribes").

Courts do not provide deference to federal agencies' interpretation of an ambiguous provisions involving Indian affairs. Rather, "[t]he governing canon of construction requires that statutes are to be construed liberally in favor of the Indians, with ambiguous provisions interpreted to their benefit." *California Valley Miwok Tribe v. United States*, 515 F.3d 1262 (D.C. Cir. 2008)(internal quotations omitted).

D. UMTRCA Standards and Procedures

"No one can conduct [in-situ extraction] activities without an NRC license" issued pursuant to the Atomic Energy Act, as amended by UMTRCA. *OST*, 896 F.3d at 523 *citing* 42 U.S.C. § 2092. UMTRCA was adopted to extend "NRC's regulatory authority over all wastes [created in] the nuclear fuel cycle [… and] to bring previously unregulated radioactive end products of the source material extraction process within the scope of NRC regulation." *Kerr-McGee Chem. Corp. v. U.S. Nuclear Regulatory Com.*, 903 F.2d 1, 7-8 (D.C. Cir. 1990)(invalidating NRC regulations that excluded wastes from UMTRCA licensing).

Limitations on tort remedies for nuclear fuel cycle activities confirm the critical role of UMTRCA compliance *before* in-situ licensing. See *Begay v. United States*, 768 F.2d 1059, 1066 (9th Cir. 1985)(no remedy for fail to warn Navajo

uranium workers). Even when uranium production causes "DNA damage and cell death," the Price-Anderson Act requires proof of "bodily injury" to pursue medical monitoring claims. *June v. Union Carbide Corp*., 577 F.3d 1234, 1249 (10th Cir. 2009)(dismissing tort claims involving uranium mill wastes).

UMTRCA regulations set out the procedural and substantive provisions for the current licensing. 10 C.F.R Part 40. Although created to address conventional milling, "Appendix A to 10 C.F.R. Pt. 40 sets forth criteria the NRC will consider in making licensing determinations for an [in-situ] uranium mining operation." *Morris v. United States NRC*, 598 F.3d 677, 694 (10th Cir. 2010). Appendix A requires analysis of the "expected full capacity of tailings or waste systems and the lifetime of mill operations." 10 C.F.R Part 40 Appendix A.

NRC has not used NEPA analysis or APA-mandated notice and comment rulemaking to limit or expand Part 40 Appendix A regulations during in-situ licensing. Such changes would be complex because, under "UMTRCA, regulatory authority is divided among three federal agencies." *Am. Mining Cong. v. United States Nuclear Regulatory Com*., 902 F.2d 781, 782 (10th Cir. 1990)(upholding Appendix A amendments).

SUMMARY OF ARGUMENT

The Commission violated NEPA and NHPA in affirming an FSEIS that lacked a competent cultural resources survey, thereby depriving the Tribe and the

public of a meaningful opportunity to participate in the NEPA process and the identification, evaluation, and mitigation processes of NHPA.

Second, the Commission erred in refusing to allow a hearing on the Tribe's contention that the license and FSEIS violated UMTRCA and NEPA by generically requiring that storage, transportation, and disposal of licensed radioactive wastes be handled and disposed pursuant to a future contract and applicable laws.

Third, the Commission erred in finding the FSEIS adequately assessed the impacts and risks associated with thousands of historic abandoned bore holes and geologic faults in the project area – again substituting a mere license condition requiring the licensee to attempt to locate and seal the boreholes after licensing instead of the analysis required by NEPA and UMTRCA.

Fourth, the Commission violated NEPA and UMTRCA regulations in failing to require the collection of admittedly necessary baseline water quality data, deferring that collection and analysis instead to a post-license and post-NEPA review.

Fifth, the Commission violated NEPA in upholding an FSEIS that did not include an adequate discussion of mitigation measures and their effectiveness in protecting groundwater, cultural resources, and other environmental concerns.

Sixth, the Commission violated NEPA by excusing the failure of NRC Staff to adhere to CEQ-promulgated NEPA procedures.

Spanning all issues, NRC unlawfully attempted to remedy violations of public review, Tribal consultation, and other mandatory NEPA, NHPA, and UMTRCA procedures within a confined adjudicatory process and *post hoc* license conditions.

STANDING

During the licensing hearings, Petitioners satisfied each element of standing through argument and evidence contained in the administrative record. See *Sierra Club v. EPA*, 292 F.3d 895, 900 (D.C. Cir. 2002)(when standing is "self-evident; no evidence outside the administrative record is necessary."). Further, the legal basis and evidence to establish standing was addressed in detail and confirmed by the Board Order LBP-10-16, 72 NRC 361, 380-394 (2010)(JA__). The Order applied the standard used by this Court to establish standing, including the "three key elements: injury-in-fact, causation, and redressability." Id. at 380 n. 35 citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992). Petitioners hereby proffer the evidence and factual findings to establish Article III standing. Id.

ARGUMENT

A. Significant Cultural Resource Impacts Require Pre-Licensing NEPA and NHPA Compliance

The Board ruled in 2015 that the FSEIS "has not adequately addressed the

environmental effects of the Dewey-Burdock project on Native American cultural, religious, and historic resources, and that the required meaningful consultation between the Oglala Sioux Tribe and the NRC Staff has not taken place." LBP-15-16, 81 NRC at 655 (JA__). This ruling was not disturbed by the Commission. CLI-16-20, 84 NRC 219 (JA__). The lack of cultural resource survey underlies this "significant deficiency" in NEPA compliance. *OST*, 896 F.3d at 523.

After remand, NRC Staff did not conduct any survey required to begin correcting the NEPA deficiency. LBP-19-10, 90 NRC at 340 (JA__). NRC Staff admitted that "the environmental record of decision in this matter does not include any new information." NRC Staff Motion for Summary Disposition (8/17/2018) at 33 (JA__); NRC Staff Initial Statement of Position (5/17/2019) at 62 (JA__). The Commission confirmed the lack of new information yet declined Petitioners' request for review. CLI-20-09 at 14-15 (JA__).

Instead of evidence of meaningful consultation with the Tribe or public involvement, NRC Staff simply asserted that the cultural resources impact information was "unavailable" under NEPA regulations. 40 C.F.R. § 1502.22. NRC Staff did not prepare the NEPA analysis required by Section 1502.22 to substantiate its generalized concerns regarding cost and time. Id. NRC Staff blamed the Tribe for refusing to provide NRC with unpaid services normally obtained through federal contract. CLI-20-09 at 13. Instead of remedying the

NEPA deficiency on remand, NRC added an additional license condition, without any NEPA or NHPA review, contemplating surveys during construction and operations. CLI-20-09 at 17-18. In short, the Commission allowed NRC Staff to "act first and comply later," leaving the license and "significant deficiency" intact. *OST,* 896 F.3d at 523.

NHPA Section 106 requires that NRC "shall, … **prior to the issuance of any license**, … take into account the effect of the undertaking…." 54 U.S.C. § 306108(emphasis added). Similarly, "[u]nder NEPA, each federal agency must prepare an [EIS] **before taking** a 'major Federal action[] significantly affecting the quality of the human environment.' 42 U.S.C. § 4332(2)(C)." *New York,* 681 F.3d at 476, *accord*, 40 C.F.R. § 1500.1(b).

Upon judicial review, NEPA and NHPA violations are governed by the APA, which provides that the reviewing court shall "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This plain language "confirms that ordinary practice is to vacate unlawful agency action." *United Steel Union v. MSHA*, 925 F.3d 1279, 1287 (D.C. Cir. 2019) *quoted by Standing Rock Sioux Tribe v. United States Army Corps of Eng'rs*, 985 F.3d 1032, 1050 (D.C. Cir. 2021)(upholding vacatur and distinguishing vacatur from injunctive relief for already-built pipeline). Here, no

construction has occurred, and agency action can be vacated without disruptive effects or injunctive relief. Id.

1. NRC failed to meet its NHPA duties before issuing the license

"A sizable number of cultural, historical, and archaeological sites have already been identified in the project area, including burial sites." *OST*, 896 F.3d at 524 (citing FEIS). Despite the lack of a cultural resources survey, the Board concluded NHPA compliance was met by "a bare minimum," and granted "summary disposition" to NRC Staff, thereby preventing a hearing on NHPA compliance. LBP-17-9, 86 NRC at 173 (JA__).

The Board-approved "bare minimum" does not include the required good faith and reasonable effort to identify historic properties (36 C.F.R. §§ 800.4(a), (b)), determine whether identified properties are eligible for listing on the National Register of Historic Places (36 C.F.R. § 60.4), assess the effects of the undertaking on any eligible historic properties (36 C.F.R. §§ 800.4(c), 800.5), determine whether the effects will be adverse (36 C.F.R. § 800.5), and avoid or mitigate any adverse effects. 36 C.F.R. § 800.6. Instead, the "bare minimum" relies on the Programmatic Agreement that relies on undefined future surveys during construction and operations, but "[b]y then,[…] it will be too late." *OST*, 896 F.3d at 523.

The "bare minimum" constituted a single introductory face to face meeting

that occurred on May 16, 2016, one follow-up conference call on January 31, 2017, and an exchange of letters that the Board recognized lacked substance on behalf of NRC Staff (but not the Tribe). 86 NRC at 182-183. Notably, the discussions focused on the Tribe again explaining in detail to NRC Staff the inadequacy "open-site" survey approach, which contained no traditional or scientific methodology. Id.

Despite NRC Staff's failure to propose any methodology to address previous deficiencies, the Tribe set forth key components for any cultural resources survey approach. Exhibit NRC-190 (JA__). Instead of engaging the good faith and reasonable discussions NHPA requires, NRC Staff simply abandoned the effort entirely and moved for summary disposition on Contentions 1A (NEPA violations) and 1B (NHPA violations), both of which involve cultural resources duties.

The Board and Commission granted summary disposition on Contention 1B, thereby denying the Tribe any opportunity to provide evidence in a hearing of NHPA violations that flow from failure to prepare a cultural resource survey. As a result, NRC has not met its obligations to "take into account the effect of the undertaking on" cultural resources at the site. 54 U.S.C. § 306108.

NRC failed to make of reasonable, good faith effort to consider the Tribe's viewpoints in determining whether National Register listing is appropriate. 54 U.S.C. § 302706(a). Without the necessary information-gathering surveys, NRC

also failed to provide the Tribe a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, or articulate views on the undertaking's effects on such properties and participate in in the resolution of adverse effects. 36 C.F.R. § 800.2.

2. NRC Staff failed to allocate sufficient time and financial resources to complete a survey

After remand, NRC Staff again abandoned its cultural resources survey efforts without addressing the significant NEPA deficiencies, purportedly due to the cost and time required to conduct a defensible on-the-ground survey. LBP-19-10, 90 NRC at 340 (JA__). However, NRC Staff never defined the estimated time and cost requirements to conduct a cultural resources survey of the project area, and instead improperly blamed the Tribe for NRC Staff's failure to accomplish a cultural survey. Id.

Instead of NEPA procedures, NRC Staff provided testimony on its unsuccessful efforts to develop a survey methodology. Exhibit NRC-192 at 2 ("the field survey will be conducted using a survey methodology that will be established in coordination with the NRC, with the support of a contractor, and the Lakota Sioux Tribes in advance of the field survey.")(JA__). This methodology was never established.

NRC identified its contractor for methodology development in January 2019, mere weeks before NRC Staff terminated its survey efforts and sought an

evidentiary hearing. Exhibit NRC-204 at 3 (JA__). The Tribe was never presented a survey methodology. The Tribe tried to assist NRC Staff and met with the contractor in February 2019, but NRC abandoned discussions on March 1, 2019 without a proposed framework to cooperatively develop the studies and analysis required to meet NRC's NEPA obligations. Exhibit NRC-215 (JA__); see also Tribe 3/12/2019 Response, Exhibit NRC-211 (JA__).

Instead of NEPA, NRC Staff moved for adjudicatory hearings that resulted in a Board Order shifting blame onto the Tribe's consistent objections to the undefined and uncompensated costs of the Tribe's involvement in preparing and implementing the survey methodology. LBP-19-10, 90 NRC at 332-333 (JA__). This approach was a far cry from NRC Staff's previous plan, which included "publishing a draft of the supplemental analysis for a 45-day public comment period by mid-February 2019. Exhibit NRC-192 at 4 (JA__).

The result effectively demands that the Tribe subsidize the NRC's NEPA duties despite the Tribe's scarce resources – a patently unreasonable request. In a footnote, the Board conceded that the amount of compensation offered to the Tribe was objectively insufficient to conduct the requisite survey. LBP-19-10, 90 NRC at 332, n. 231 (JA__). The $10,000 that NRC Staff offered the Tribe to develop the methodology and conduct all of the on-the-ground survey work stands in stark contrast to the $645,000 that NRC Staff expected to reap from the applicant.

Exhibit NRC-192 at 4 (JA__). The NRC Staff never estimated the cost for the Tribe to develop and implement a survey for the Dewey-Burdock Project.

Further violating NEPA procedures, the Board relied on exhibits it offered *sua sponte* for the 2019 hearing to conclude that even the most basic implementation of a cultural resources survey of the site would, at minimum (without accounting for oral interview expenses), cost the Tribe alone approximately $30,000 in participation costs. 8/29/2019 Transcript at 33:5-11 (JA__). Neither the Board nor the Commission calculated, and the record does not support, a cost estimate for the Tribe, a contractor, or other qualified persons to design and implement a survey. See Exhibit NRC-204 at 5 (1/25/2019 NRC Staff letter rejecting discussion the Tribe's funding proposals)(JA__).

Not until the hearing was it disclosed that NRC Staff could have, but did not, direct its contract archeologist to secure the required expertise to design and conduct the cultural resources survey. 8/29/2019 Transcript at 39:14-25 to 40:1-7 (Mr. Spangler explaining that his contract allowed him to bring on additional staff)(JA__). Despite this option of directing the NRC Staff's contractor to hire qualified persons, NRC Staff never even communicated this option to the Tribe. Id.

3. NRC Staff failed to comply with 40 C.F.R. § 1502.22

NRC's refusal to use NEPA procedures (40 C.F.R. § 1502.22) to consider availability of the cultural resources information, "vitiate(s) the statute's action-

forcing purpose." *OST*, 896 F.3d at 520 (internal quotations omitted). When an agency claims the necessary information is unavailable, CEQ regulation requires that agencies "shall include within the environmental impact statement:"

> (1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information [...]; (3) a summary of existing credible scientific evidence which is relevant to [the evaluation], and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.

40 C.F.R. § 1502.22(b). See also *Sierra Club v. US DOT*, 962 F. Supp. 1037, 1045 (N.D. Ill. 1997)(finding lack of NEPA compliance were the analysis "was not incorporated into the final impact statement.) "Failing to incorporate the study into the final impact statement deprives the public and other participants in the process of the opportunity to comment on it." Id. *citing Sierra Club v. Marsh*, 976 F.2d 763, 770 (1st Cir. 1992)(citations omitted).

CEQ regulations also require agencies to "insure the professional integrity, including scientific integrity of the discussions and analysis…." 40 C.F.R. § 1502.24. A federal agency may not simply claim that it lacks sufficient information to assess the impacts of its actions. Rather, "[a] conclusory statement unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize the issues, but affords no basis for a comparison of the problems involved with the proposed

project and the difficulties involved in the alternatives." *Seattle Audubon Society v. Moseley*, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992).

Here, NRC was required to demonstrate in an EIS why no qualified persons could have conducted a cultural resource survey of the project area. 40 C.F.R. § 1502.22(b). The Commission instead endorsed NRC Staff's refusal to use a NEPA document to justify its decision to forego NEPA analysis. LBP-19-10, 90 NRC at 340, 353; CLI-20-09 at 10 (JA__).

First, Board and the Commission insist NRC "is not bound by CEQ regulations." CLI-20-09 at 4, 10 (CEQ "regulations can serve as guidance")(JA__). However, all provisions in "Parts 1500 through 1508" of CEQ's NEPA Regulations are "applicable to and binding on all Federal agencies for implementing the procedural provisions" of NEPA "except where compliance would be inconsistent with other statutory requirements." 40 C.F.R § 1500.3(a).

Neither the Board nor Commission identified any substantive conflict that would prevent procedural compliance with the express procedural requirements of § 1502.22. Independent agencies, such as NRC, are entitled to no deference in interpreting NEPA, as that duty is assigned exclusively to the CEQ. *United Keetoowah Band of Cherokee Indians in Okla. v. FCC*, 933 F.3d 728, 738 (D.C. Cir. 2019). NRC's NEPA implementation remains "not in accordance with law," and the APA requires the court to "hold the agency's action unlawful." *OST*, 896

F.3d at 530 quoting 5 U.S.C. § 706(2)(A).

Instead of justifying its "unavailable" information determination in an EIS, the Board used its confined adjudicatory process to unlawfully supplant a NEPA document that requires public comment and review. *NRDC, et al. v. NRC*, 879 F.3d 1202 (D.C. Cir. 2018)(confirming that the Commission's practices in this regard "are not idle concerns" (879 F.3d at 1210) and is neither "ideal or even desirable." Id. at 1212). Commissioner Baran emphasized in dissent that "by allowing the significant deficiencies of NEPA analyses to be corrected by adjudicatory proceedings after a license has already been issued, the Commission has put NRC on course to repeatedly and predictably violate a core requirement of NEPA." CLI-20-09 at 4(dissent). He further recognized that adjudicatory proceedings are "much more restrictive" than a public NEPA process:

> Many interested stakeholders likely would be unable to demonstrate standing to intervene or to submit a contention that meets NRC's stringent admissibility standards. Or they may lack the financial resources to participate in an adjudicatory hearing. Yet, these stakeholders may offer insightful and valuable comments for the agency to consider as part of a public comment period….

Id.

In *NRDC v. NRC*, this Court allowed the post-hoc supplementation only because a remand there would be "utterly pointless," as the required analyses were already completed and part of the evidentiary record. Id. This is the critical distinguishing factor here – the cultural resources impact and mitigation analysis

has not been conducted and the public never had a chance to comment on NRC Staff's 40 C.F.R. § 1502.22 rationale.

Apart from the issue of NRC forcing the Tribe to conduct the survey, the record confirms that all relevant information is not "unavailable" under the 1502.22 provisions. A Board footnote recognized that conducting oral history interviews after the completion of a pedestrian survey is "preferable" to no survey and analysis at all LBP-19-10, 89 NRC at 333 n. 237. Although oral interviews informed by surveys may be preferable in some instances, this fact does not render this valuable information "unavailable" under 40 C.F.R. § 1502.22. The record contains numerous admitted declarations (Exhibit INT-023; JA__) confirming that relevant information is available from scores of Lakota people with knowledge of the cultural significance of historic and cultural resources at the Dewey-Burdock site.

NRC Staff conceded that a contractor with relevant qualifications could design and implement the cultural resources survey. LBP-19-10, 90 NRC at 334. Indeed, NRC Staff has previously met its NEPA duty by hiring independent, qualified cultural resources consultants to coordinate and/or conduct the required survey. See *In the Matter of Hydro Resources, Inc.*, 62 NRC 442, 451-452 (2005) (upholding credible NEPA cultural resources impact analysis conducted by qualified consultants).

Other agencies routinely rely on qualified agency scientists to carry out the necessary surveys and analysis, with significant input, participation, and consultation from the relevant tribes, short of a mandate that a certain tribe conduct the survey. See e.g. *Ctr. for Biological Diversity v. United States BLM*, 2017 U.S. Dist. LEXIS 137089, at *54-55 (D. Nev. Aug. 23, 2017)(holding that BLM "engaged in a good-faith attempt to identify relevant cultural sites and consult with the tribes about how best to protect them" including preparation of significant cultural and ethnographic reports and studies). It is of no legal consequence that NRC Staff does not have such expertise.

NRC lack of expertise on cultural resources and the failure to reconcile federal court rulings establishing that federal agencies cannot simply ignore CEQ regulations do not excuse the agency's failure to comply with the law here. *Massachusetts v. Watt*, 716 F.2d 946, 951 (1st Cir. 1983) ("[U]nless a document has been publicly circulated and available for public comment, it does not satisfy NEPA's EIS requirements.").

4. Board Amendments to the License and the Programmatic Agreement Violate NEPA and the NHPA

The failure to use NEPA and NHPA standards and procedures to consider availability of the cultural resource information is not harmless. *OST*, 896 F.3d at 520. The Board found "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." LBP-19-10, 90 NRC 341 n. 272 (JA__). Yet, the Board also ruled that "NRC Staff has not updated its FSEIS to address the deficiencies identified in LBP-15-16…." Id. at 340 (JA__).

Instead of ensuring NRC Staff met the federal cultural resources obligations, the Board used the hearing to circumvent NEPA and the NHPA by amending the Programmatic Agreement to include additional monitoring requirements, and then relied on the amendment to find NEPA and NHPA compliance. Id. at 341-345. There are multiple problems with the use of the Programmatic Agreement to provide *post hoc* remedies of NEPA and NHPA violations.

First, the Programmatic Agreement is purely a creature of the NHPA, which is mainly concerned with cultural resources and historic properties that rise to the level of inclusion within the National Register of Historic Places. See Exhibit NRC-018-A at 6 ¶ 3(k); 9, ¶ 6(l); 11 ¶ 9(g) (JA__). Thus, any cultural resources not eligible require no further analysis under the NHPA or the Programmatic Agreement, and therefore the Agreement cannot meet NEPA's broader duties to address cultural resources not meeting the National Register criteria. See CLI-16-20, 84 NRC at 248 (recognizing limitations of NHPA).

Second, the Programmatic Agreement was finalized in 2014, in conjunction with the FSEIS, Record of Decision and license. The Programmatic Agreement relied on the surveys that were subsequently found inadequate: "WHEREAS,

surveys to identify historic properties have been completed for the project including Class III archaeological surveys and tribal surveys to identify properties of religious and cultural significance." Exhibit NRC-018-A at 3 (JA__). These same cultural resources surveys were rejected as incomplete and incompetent. CLI-16-20, 84 NRC at 243-244 (JA__). Simply put, the central premise of the 2014 Programmatic Agreement has been invalidated and an amendment cannot now be used to comply with NHPA or NEPA.

Third, the Board did not subject its new license condition to any public notice or comment or otherwise use any NEPA document or NHPA consultation to inform its license amendment. This fact renders the amendment *ultra vires*.

Last, the new condition is inadequate to protect Lakota cultural resources or to satisfy NEPA's public comment requirements, as it only provides the affected Tribes a thirty (30) day comment period on the identity of the Powertech-selected archaeological monitor. LBP-19-10, 90 NRC 344-345. The post-hearing insertion of the license condition does nothing to remedy significant NEPA and NHPA deficiencies and confirms NRC's "act first and comply later," approach to licensing that NEPA and NHPA do not allow. *OST*, 896 F.3d at 523.

B. Failure to Address Impacts Associated with Creation, Transport and Disposal of Solid Radioactive Waste

The Commission erroneously upheld the Board's refusal to admit and consider the Tribe's Contention 7, challenging the FSEIS' failure to analyze and

regulate the creation, storage, transport, and disposal of solid 11e2 byproduct material.[2] CLI-16-20, 84 NRC at 229-234 (JA__). The Tribe pled Contention 7 three separate times (id. at 229 n. 53), only to have the Board and Commission side-step the fate of the solid 11e2 byproduct material each time, asserting the Tribe had not raised a "substantial question for review." Id. at 229-234. The Commission claimed that its decision relied on "expected license conditions," but no license condition applies UMTRCA or NEPA standards to solid 11e2 byproduct material created by the Dewey-Burdock Project. Id. at 233-234. The license conditions merely prohibit creation of 11e2 byproduct material in the absence of a still-nonexistent off-site disposal contract. Id.

NRC must admit any contention that provides: (a) "a specific statement of the issue of law or fact to be raised," (b) an explanation as to how "the issue raised . . . is within the scope of the proceeding," and (c) "sufficient information to show that a genuine dispute exists . . ." 10 C.F.R. § 2.309(f)(1). Instead of allowing Petitioners to provide evidence, testimony, and argument on the lack of lawful UMTRCA and NEPA analysis of solid 11e2 byproduct material, the Commission dismissed the contention on the basis that the pleading did not "substantively dispute the analysis of impacts" in the FSEIS. 84 NRC at 230. Requiring a

[2]Named for the definition, "11(e)(2) byproduct material" are the licensed radioactive wastes created by the Dewey-Burdock Project. 42 U.S.C. § 2014(e)(2).

"substantive dispute" instead of accepting the well-pled genuine dispute (10 C.F.R. § 2.309(f)(1)) unlawfully shielded review of the fate of solid 11e2 byproduct material. 84 NRC at 230-231 (refusing to "revisit" regulatory exemptions for in-situ licensing).

Contention 7 squarely challenges the lawfulness of NRC's *ad hoc* practice avoiding analysis of site-specific disposal plans for radioactive 11e2 byproduct material created by NRC-licensed in-situ facilities. *Kerr-McGee Chem. Corp*, 903 F.2d at 7-8 (1990)(discussing legislative intent to extend "NRC's regulatory authority [… and] to bring previously unregulated radioactive end products of the source material extraction process within the scope of NRC regulation.").

Contention 7 was dismissed without resolving the genuine dispute over the license that allows Powertech to create and possess 11e2 byproduct material based on licensing procedures that omitted analysis and approval of storage and disposal of solid 11e2 byproduct material created by the in-situ facility. 10 C.F.R. Part 40, Appendix A.

1. The License Fails to Address Solid 11e2 Byproduct Material

The creation, possession, and permanent disposal of radioactive wastes are central features of the modern UMTRCA-based regulation of any conventional mill or in-situ facility. 10 C.F.R. § 40.3 (license required for any person to "own, receive, possess, use, transfer, provide for long-term care, deliver or dispose of

byproduct material"). UMTRCA regulations compel NRC to ensure that "[e]ach application must clearly demonstrate how the requirements and objectives set forth in appendix A of this part have been addressed," including all aspects of creation, storage, and disposal of radioactive wastes, before a license can issue. 10 C.F.R. § 40.31(h)("Failure to clearly demonstrate how the requirements and objectives in appendix A have been addressed shall be grounds for refusing to accept an application." The relevant regulations state, in plain language, with no in-situ exception:

> Every applicant for a license to possess and use source material in conjunction with uranium or thorium milling […] is required by the provisions of § 40.31(h) to include in a license application proposed specifications relating to milling operations and the disposition of tailings or wastes resulting from such milling activities.

10 C.F.R. Part 40 Appendix A.

The Commission refused to hear argument or evidence on NRC Staff's decision to accept an application that lacked information on disposal and long-term care of solid 11e2 byproduct material. 84 NRC at 230-234. Even though Contention 7 was not heard, the record confirms NRC issued the license without applying Appendix A standards and without an FSEIS that "thoroughly considered the environmental issues surrounding uranium waste disposal." *Nuclear Info. & Res. Serv. v. NRC*, 509 F.3d 562, 569 (D.C. Cir. 2007).

Although there is no in-situ exception, instead of requiring Powertech to address disposal specifications and environmental impacts NRC Staff deferred consideration of Appendix A requirements to some later date, after licensing. 84 NRC at 232. The FSEIS merely designates the White Mesa Uranium Mill near the White Mesa Ute Community in Utah as the presumptive site for disposal of more than 300 cubic yards of solid 11e2 byproduct material generated annually by the proposed Powertech facility. FSEIS at 2-53 (JA__). However, because Contention 7 was dismissed, the Tribe was precluded from presenting additional testimony or other evidence on the environmental issues involved with the White Mesa disposal alternative.

The administrative record contains no license allowing transport to, and disposal of solid 11e2 byproduct material at, White Mesa. The license does not authorize Powertech to carry out any activities beyond its "[l]icensed site," which "means the area contained within the boundary of a location under the control of persons generating or storing byproduct materials under a Commission license." 10 C.F.R. Part 40 Appendix A(preamble). Indeed, controversies surrounding the White Mesa disposal cells make closure a foreseeable event, but no other options were considered in the FSEIS. See *Grand Canyon Tr. v. Energy Fuels Res. (U.S.A.)*, 269 F. Supp. 3d 1173, 1198 (D. Utah 2017)(addressing tailings cells and federal laws applicable to 11e2 byproduct materials). Moreover, the FSEIS

confirms that the White Mesa mill lacks a license from Utah to accept and dispose of the wastes created by Powertech. FSEIS at 3-116 (JA__). By dismissing Contention 7, the Commission unlawfully ignored Appendix A requirements applicable to creation, storage, transportation, disposal and long-term care of all anticipated radioactive wastes.

Issuing a license to create 11e2 byproduct material without addressing disposal and long-term care is precisely the circumstance that UMTRCA was adopted to remedy and prohibit. *Kerr-McGee Chem. Corp*., 903 F.2d at 7-8 (1990). Powertech proposed to store its 11e2 byproduct materials on site for an indefinite period, but like the omission of off-site impacts, the FSEIS confirms the application does not address criteria for on-site disposal. FSEIS at 3-116, 4-237 (JA__). Similarly, the license condition requiring a future disposal contract does not address compliance with any of the Appendix A Criteria that ensures the ultimate "[t]itle to the byproduct material… must be transferred to the United States" or a willing State. 10 C.F.R. Part 40, Appendix A, Criterion 11(C).

The FSEIS notes, but does not analyze, the impacts that waste shipments will have impacts across the Intermountain West. FSEIS at 4-22 (JA__). As pled, Contention 7 raised a genuine dispute over the naked assertion that impacts of shipping processed yellowcake from South Dakota to Tennessee in sealed containers poses the same risks as trucking 11e2 byproduct materials across the

high-elevation passes of the Intermountain West, for disposal in Southeastern Utah. Id. The license, like the FSEIS and application, presents no information on the type of containers required for the shipments from the Dewey-Burdock Project and no corresponding information on the moisture content of the11e2 byproduct materials. FSEIS at 4-22 (JA__). Decommissioning wastes are ignored completely.

UMTRCA and the Part 40 regulations impose procedural and substantive requirements that must be satisfied, in full, before NRC may license an in-situ facility that creates 11e2 byproduct material. Site-specific licensing is not the forum for NRC to amend one of the three sets of agency regulations (*Am. Mining Cong*, 902 F.2d at 782) that implement UMTRCA at in-situ facilities. 84 NRC at 230-231 (summarily describing NRC's re-interpretation of Part 40 regulations). Petitioners respectfully request this Court direct NRC on remand to apply and enforce UMTRCA and its Part 40 implementing regulations, as written, to the Dewey-Burdock proposal.

2. Solid 11e2 Byproduct Material Storage and Disposal was not Subjected to NEPA Analysis

On three occasions, the Tribe filed a detailed NEPA "contention alleging inadequate analysis of direct, indirect, and cumulative impacts of disposal of byproduct material." 84 NRC at 230. The Commission rejected the Tribe's NEPA-based portion of Contention 7 because the FSEIS "did not differ materially from

the parallel section in the DSEIS." Id. Contention 7 was also rejected on the Commission's "expectation that the license would include conditions regarding waste disposal." Id. at 233. However, the administrative record contains no NEPA analysis of reasonable disposal alternatives and mitigation measures and no substantive conditions were included in the license. 84 NRC at 233-234. The license conditions merely require the licensee enter into a disposal contract before beginning operations and stop creating 11e2 byproduct material if the contract lapses. Id.

In this way, however, the Commission openly rejected this Court's analysis and reasoning in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012) and instead eliminated site-specific NEPA scrutiny of 11e2 byproduct material disposal altogether from its Dewey-Burdock licensing decision. 84 NRC at 233 n. 85 *citing New York*, 681 F.3d 471 (waste confidence rule NEPA violations). The reasoning for applying NEPA to the waste confidence rulemaking in *New York* confirms the NEPA violation in the present site-specific licensing. Id.

This "act first and comply later" approach not only violates NEPA, it threatens to strand 11e2 byproduct materials in an area of the Black Hills with deep cultural significance. *OST*, 896 F.3d at 523. UMTRCA's licensing regulations recognize that 11e2 byproduct materials, including in-situ wastes, remain dangerously radioactive for millennia and requires eventual transfer to federal

ownership for perpetual operation and maintenance in a government facility. 10 C.F.R. Part 40, Appendix A, Criterion 11(C); Criterion 10 (long term care surety).

Instead of providing a thorough NEPA analysis of the environmental impacts of disposal for the Dewey-Burdock Project, the FSEIS merely asserts that solid 11e2 byproduct material will be stored and disposed in conformance with applicable laws. FSEIS at 2-53 (JA__). The FSEIS does not contain NEPA analysis of the disposal proposal, foreseeable impacts, alternatives, or mitigation measures. NRC's unlawful reliance on a promise of future compliance instead of the "hard look" analysis of the practical and legal aspects involving creation, storage, transport, and disposal of the radioactive waste violates NEPA and implementing regulations. *New York*, 681 F.3d at 681, *accord*, 40 C.F.R. § 1500.1(b).

Like the waste confidence rule, the NEPA violation here is not resolved if a disposal contract is eventually signed. *New York*, 681 F.3d at 476. Both agency actions ignore the foreseeable possibility that wastes may become stranded on the site "if the waste disposal agreement expires or is otherwise terminated." Id. Both actions allow creation and indefinite storage without NEPA analysis of the range of available alternatives for radioactive wastes not yet shipped off site when a disposal contract fails. Here, nothing in the administrative record addresses the foreseeable possibility that Powertech is unable to contract with White Mesa or

another licensed disposal facility, or that the contract may fail. *Standing Rock Sioux Tribe v. United States Army Corps of Eng'rs*, 985 F.3d 1032, 1050 (D.C. Cir. 2021)(requiring analysis of potential consequences when risk is sufficient that a person of ordinary prudence would take it into account in reaching a decision).

By dismissing Contention 7, the Tribe was precluded from providing testimony and argument on the NEPA deficiencies. Indeed, the Commission's dismissal of the Tribe's well-pled Contention 7 for failing to "substantively dispute the analysis of impacts" in the FSEIS (84 NRC at 230) failed to cite any of the Tribe's contention-stage filings, which described the "genuine dispute" required by the regulations. See 3/17/14 Tribe Contentions on FSEIS (JA__).

NRC's failure to require compliance with UMTRCA and NEPA before issuing the license is a serious violation that can be remedied by setting aside the licensing actions until NRC "clearly demonstrate[s] how the requirements and objectives set forth in appendix A […] have been addressed." 10 C.F.R. § 40.31(h).

C. The FSEIS Fails to Adequately Analyze the Groundwater Quality Impacts Associated with the Thousands of Abandoned Boreholes and Faults at the Site

The Commission upheld the Board's finding of a NEPA deficiency regarding hydrogeological information but excused this NEPA violation by adding a new license condition requiring post-licensing data gathering and analysis. See 84 NRC at 226, 269 n. 2 (Baran Dissent). Again, instead of using a NEPA-

compliant analysis to inform its decision, NRC relies on a license condition to rescue an FSEIS that lacks adequate hydrogeologic data by allowing compliance **after** the NEPA process is completed, after a license is issued, and with no chance for any public review. See e.g., FSEIS at E-51 ("The commenter is correct in stating that wellfield hydrogeologic data packages will not be made available for public review.")(JA_). NEPA "does not permit an agency to act first and comply later." *OST*, 896 F.3d at 523.

Collecting hydrogeologic data after licensing also violates the UMTRCA regulation that specifically requires:

> The information gathered on boreholes must include both geologic and geophysical logs in **sufficient number and degree of sophistication to allow determining significant discontinuities, fractures, and channeled deposits of high hydraulic conductivity.**

10 C.F.R. Appendix A, Criteria 5G(2)(emphasis added). The late Dr. Moran's expert testimony confirmed that inadequate data leads to in adequate analysis, including significant contradictory evidence in the application and the FSEIS on numerous potential pathways for groundwater conductivity, inter-fingering sediments, fractures and faults, breccia pipes and/or collapse structures, and the 4000 to 6000 unidentified exploration boreholes present in the project area. Exhibit OST-001 at 18-22 (JA__). A license condition was added to address his testimony after licensing, but the inadequate application, FSEIS analysis, and license were otherwise undisturbed. 84 NRC at 226, 269 n. 2 (Baran Dissent).

Dr. LaGarry provided written expert testimony that confirmed the hydrogeology is actually riddled with at least: 140 open, uncased holes; 16 previously cased, redrilled open holes; 4 records of artesian water; 13 records of holes plugged with wooden fenceposts; 6 records of holes plugged with broken steel; 12 records of faults within or beside drilled holes; and 1 drawing of 2 faults and a sink hole within a drilled transect. Exhibit OST-029 at 2 (JA__).

Expert testimony also showed that the FSEIS failed to demonstrate the hydrogeological conditions necessary to contain the lixiviant. Powertech witness Mr. Lawrence readily admitted that to ensure containment, the operator would need for the Fuson Shale to be relatively impermeable. 8/20/2014 Transcript (JA__), 1047:20-23. However, Administrative Judge Barnett observed that the pumping tests, "results were found to be consistent with a leaky confined aquifer model." Id. at 1050:18 to 1051:5. He also confirmed that Powertech's numerical model "concluded that vertical leakage through the Fuson shale is caused by improperly installed wells or improperly abandoned boreholes." Id. He sought to confirm that "whether it is coming from boreholes or whatever else, [the hydrogeological setting] is leaky." Id. at 1050:18 to 1051:5. In confirmation, the NRC Staff witness responded: "Yes, that's correct." Id. at 1051:8. Powertech witness Mr. Lawrence also agreed: "Yes, there were certainly conditions that demonstrated communication." Id. at 1051:15-16.

Read as a whole, the record confirms a leaky aquifer, even though a contained aquifer is necessary for in-situ production. Critically, Mr. Lawrence admitted that the required additional analysis would occur "outside of the FSEIS," despite the lack of data and undisputed fact that Fuson shale is leaking. Id. at 1052:6-8.

Instead of using the NEPA process to establish the hydrogeology conditions of the area, the Commission relied on a license condition deferring data collection and analysis to post-NEPA review by an internal NRC body called a Safety and Environmental Review Panel. FSEIS at 2-18 (JA__). The expansive scope of the non-NEPA panel's review confirms the significant deficiency in the FSEIS:

> The wellfield hydrogeologic data package will describe the wellfield, including (i) production and injection well patterns and location of monitor wells; (ii) documentation of wellfield geology (e.g., geologic cross sections and isopach maps of production zone sand and overlying and underlying confining units); (iii) pumping test results; (iv) sufficient information to demonstrate that perimeter production zone monitor wells adequately communicate with the production zone; and (v) data and statistical methods used to compute Commission-approved background water quality….

Id. (JA__).

NEPA's public disclosure and "hard look" impact review requires information to be presented for interdisciplinary analysis in a draft and final EIS; an FSEIS that does not contain admittedly necessary information does not comply with NEPA. *South Fork Band Council v. Dept. of Interior*, 588 F.3d 718, 726 (9th

Cir. 2009). NEPA does not allow NRC to defer compliance until after licensing. *OST*, 896 F.3d at 523.

D. Failure to Adequately Analyze Water Quality Baseline

NRC unlawfully issued the license and delayed NEPA's pre-licensing baseline requirement by relying on "industry practice" to determine baseline after licensing. 84 NRC at 252. Delaying NEPA analysis until after licensing is illegal. *OST*, 896 F.3d at 523. Nevertheless, the Commission upheld the FSEIS' analysis of baseline water quality conditions at the site. Id. at 251-253.

NEPA compliance requires an EIS that fully "describe[s] the environment of the areas to be affected or created by the alternatives under consideration." 40 C.F.R. § 1502.15. Documenting baseline conditions of the affected environment is a fundamental NEPA requirement:

> Without establishing the baseline conditions which exist ... before [a project] begins, there is simply no way to determine what effect the [project] will have on the environment and, consequently, no way to comply with NEPA.

Great Basin Resource Watch v. BLM, 844 F.3d 1095, 1101 (9th Cir. 2016)(EIS for mineral extraction project failed to obtain adequate baseline air quality data) quoting *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988).

> [W]ithout [baseline] data, an agency cannot carefully consider information about significant environment impacts. Thus, the agency fail[s] to consider

> an important aspect of the problem, resulting in an arbitrary and capricious decision.

Northern Plains v. Surf. Transp. Brd., 668 F.3d 1067, 1085 (9th Cir. 2011).

The record confirms that during the NEPA process and hearings, NRC Staff and Board had difficulty applying 10 C.F.R. Part 40, Appendix A Criteria to the in-situ facilities. LBP-15-16, 81 NRC 618, 665 (JA__). Regardless, NEPA-mandated baseline water quality cannot be established by "collection of groundwater quality data in a staggered manner" after the licensing process is complete and outside of the NEPA review. Id. at 637, 659.

The Commission upheld the Board ruling that baseline analysis in "the EIS is sufficient as long as it adequately describes the process by which the monitoring data will be obtained" after licensing. Id. at 661. NEPA prohibits this approach. *OST*, 896 F.3d at 523.

E. Failure to Adequately Review Mitigation Measures

NEPA compliance must be achieved within an EIS that "shall be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them." 40 C.F.R. § 1502.8. Here, the FSEIS listing of mitigation measures does not meet NEPA's twin aims: 1) to satisfy the agency's "obligation to consider every significant aspect of the environmental impact of a proposed action [;and, 2) to] ensure that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process."

Baltimore Gas & Elec. Co., 462 U.S. 87, 97 (1983) (internal citations and quotation marks omitted).

Although perfection is not required, "Congress authorizes and directs that, to the fullest extent possible […] all agencies of the Federal Government shall […] include in […] a detailed statement by the responsible official on[…] any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C)(ii) *cited by Robertson,* 490 U.S. 332, 351-2 (1989). If the Court finds that the mitigation analysis within the FSEIS is inadequate, the FEIS and agency action are properly set aside. *Robertson*, 490 U.S. at 353 ("[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA.").

The FSEIS simply lists and mentions mitigation measures, and asserts without support that mitigation might eliminate or substantially reduce the Project's adverse impacts. FSEIS at 6-1 through 6-19 (JA__). The FSEIS mitigation analysis is limited to a list of plans to be developed later, outside the NEPA process. Id.

For instance, the FSEIS concedes that consultation for identification and mitigation of cultural resources impacts was incomplete when the FSEIS issued. See FSEIS at 3-94 ("At this time, consultation on the evaluation and effects determination of historic properties is ongoing with all consulting parties,

including interested tribes. The outcome of this consultation effort will be included in the programmatic agreement.")(JA__).

The FEIS anticipated that "[m]itigation measures identified [after licensing] could reduce an adverse impact to a historic or cultural resource by reducing the adverse effect on a historic property. (NRC, 2009a)." FSEIS at 4-157 (JA__); see also, FSEIS at 1-16, 1-22, 5-47, 5-48 (JA__); FEIS at E-190, E-197(all expressly relying on as-of-yet uncompleted Programmatic Agreement, with as-of-yet undersigned and unreviewed future plans to mitigate impacts)(JA__); compare, Exhibit NRC-0016 (letters from Oglala Sioux Tribe President Brewer and Standing Rock Sioux Tribe)(JA__).

The FSEIS does not "include appropriate mitigation measures" or reasonable discussions of available means to mitigate adverse environmental impacts. 40 C.F.R. § 1502.16(h). NEPA regulations define "mitigation" to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 C.F.R. §§ 1508.20(a)-(e). An EIS that merely lists mitigation options does not comply with NEPA because "snippets do not constitute real analysis." *Natural Resources Defense Council, Inc. v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988)(mere mention that protected species may be exposed to risks of oil spills did not provide lawful NEPA analysis). Mitigation must be subjected to NEPA's public review process.

> As the D.C. Circuit explained, "whether the analysis is generic or site-by-site, it must be thorough and comprehensive." […] Thus, the NRC must

> produce a comprehensive and thorough NEPA analysis of all NEPA issues […], including mitigation […], and if the issue is not covered in a generic EIS it must be covered in the site-specific NEPA document.

In re Calvert Cliffs 3 Nuclear Project, LLC, 76 NRC 127, 178 (2012) *discussing New York*, 681 F.3d at 480-81. This duty extends to all resources, including "environmental justice" concerns.

> We expect NRC EISs, and presiding officers in adjudications, to inquire whether a proposed project has disparate impacts on "environmental justice" communities and whether and how those impacts may be mitigated.

In Re Hydro Resources, 53 NRC 31, 64 (2001)(emphasis supplied) *citing Louisiana Energy Services, L.P.*, 47 NRC 77, 106-110 (1998)(remanding for consideration of mitigation measures).

Here, the FSEIS was finalized while NRC Staff and the applicant were still considering mitigation measures. Exhibit OST-028 (10/7/2014 letter confirming "programmatic agreement" resources "currently being developed" and estimating "treatment plan should be complete by or before the end of 2014.")(JA__); OST-027 (10/10/2014 U.S. FWS email requesting additional information on eagles and completion date of Avian Plan)(JA__); OST-024 (Eagle take permit request)(JA__); OST-023 (Draft Avian Plan)(JA__); OST-022 (7/8/2014 BLM letter requesting information on mitigation plans)(JA__).

NRC Staff Counsel clearly stated the NEPA violation in pragmatic terms: "I don't see how the Staff could have evaluated something that did not exist until after

– until seven months after it finalized the EIS." 8/19/2014 Transcript at 917:20-23 (Mr. Clark)(JA__). Similarly, Powertech's counsel argued that "mitigation plans are permitted to be developed after license issuance per the *Hydro Resources* case…." 8/21/2014 Transcript at 1210:2-3 (Mr. Pugsley)(JA__). Powertech's counsel then listed the undeveloped mitigation relied upon in the FSEIS, such as "post-license issuance pump tests and hydrologic wellfield packages" (id. at 1210:9-10) and "continuing consultation […] to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize or mitigate adverse effects on historic properties." Id. at 1210:25-1211 (JA__).

The FSEIS does not contain the required evaluation of the effectiveness of undeveloped mitigation measures and therefore does not meet NRC's NEPA duties. *Neighbors of Cuddy Mountain v. U.S. Forest Serv*., 137 F.3d 1372, 1381 (9th Cir. 1998)(disapproving an EIS that lacked such an assessment). It is well established that all agencies must fully review whether the mitigation of mineral development activities will be effective. See *South Fork Band Council*, 588 F.3d 718, 728 (9th Cir. 2009).

The purpose of the mitigation analysis is to evaluate whether anticipated environmental impacts can be avoided. *Robertson*, 490 U.S. at 351-52 (citing 42 U.S.C. § 4332(2)(C)(ii)). It is not lawful to base NEPA analysis on "anticipated-but-unidentified mitigation measures, the specifics of which did not even have to

be submitted for examination until six months after the license issued." *Am. Rivers & Ala. Rivers All. v. FERC*, 895 F.3d 32, 54 (D.C. Cir. 2018)(setting aside FEIS and license). NEPA analysis of mitigation without evaluation of effectiveness does not inform the decisionmaker (or anyone else) on whether impacts can be avoided by applying the mitigation measures. *South Fork Band Council*, 588 F.3d at 726 (9th Cir. 2009). Conversely, evidence of mitigation effectiveness informs the reader of the extent mitigation is *not* likely to eliminate impacts of the project.

For example, the FSEIS merely refers to groundwater mitigation via future license conditions to address known hydrogeological features that may result in "draw-down induced migration of radiological contaminants from abandoned open pit mines in the Burdock area." FSEIS at E-135 to 136 (JA__). Similarly, the FSEIS relies on undeveloped mitigation plans to address: air impacts (FSEIS at E-163 to 164)(JA__); land disposal of radioactive waste (FSEIS at E-56)(JA__); wildlife protections (FSEIS at E-158 to 159)(applicant "actively working on an avian monitoring and mitigation plan" when FEIS issued)(JA__); and, storm water control (8/21/2014 Transcript at 1273:20-1278:24)(extensive discussion on cursory "Best Management Practices" used in lieu of mitigation)(JA__).

NEPA compliance requires "reasonably complete discussion of possible mitigation measures," and not plans to make plans after licensing, outside of the NEPA process, shielded from public review or comment. *Robertson*, 490 U.S. at

353. The FSEIS did not analyze the effectiveness of nonexistent mitigation, and therefore, it violates NEPA. Id.; 8/19/2014 Transcript at 917:20-23 (Mr. Clark)("I don't see how the Staff could have evaluated something that did not exist until after – until seven months after it finalized the EIS.")(JA__).

F. The Commission Excused NRC Staff's Failure to Follow CEQ-Promulgated NEPA Regulations

The Commission dismissed Contention 8, which claimed that NRC, like all federal agencies, must follow scoping and all of CEQ's comprehensive procedural requirements, with substantive exceptions not applicable here. 40 C.F.R. § 1500.3. The administrative record contains no Commission finding of a substantive hurdle that prevents compliance with the CEQ regulations' "procedural provisions." Id. Dismissal of Contention 8, in combination with the NEPA violations discussed throughout this brief, prevented the Tribe from presenting argument and testimony on NRC's unlawfully truncated NEPA process.

CEQ regulations clearly state that "Parts 1500 through 1508 […] provide regulations applicable to and binding on all Federal agencies for implementing the procedural provisions" of NEPA. 40 C.F.R §1500.3. NRC continues to disparage the binding CEQ regulations and claim they do not apply to licensing in-situ facilities. CLI-20-09 at 4 (CEQ "regulations can serve as guidance."), 10 ("NRC is not bound by CEQ regulations").

NRC's conclusion that CEQ procedural regulations do not apply to UMTRCA licensing decisions is "not in accordance with law," and therefore APA requires the Court to "hold the agency's action unlawful." *OST*, 896 F.3d at 530 quoting 5 U.S.C. § 706(2)(A). The "seriousness of the NEPA deficiency is particularly clear here, because the point of NEPA is to require an adequate EIS before a project goes forward, so that construction does not begin without knowledge of the affected cultural and historical sites." Id. Exclusion of scoping, combined with the other serious NEPA deficiencies, requires vacatur of the FSEIS, ROD, and license. Id. There will be minimal disruptive effect because the vacatur remedy provides the required opportunity for NRC to apply the CEQ regulations applicable to "all Federal agencies," which NRC admittedly did not do before taking the challenged actions. 40 C.F.R § 1500.3(emphasis supplied).

Notably, the CEQ regulations command that "[t]here shall be an early and open process" known as "scoping," to identify issues early, and throughout the NEPA process. 40 C.F.R. § 1501.7. The Board found that NRC Staff failed to conduct NEPA's scoping procedures. LBP-13-09, 78 NRC 37, 74-75 (JA___). The Board dismissed Contention 8 by erroneously concluding that "NRC staff need not conduct a scoping process." Id. citing 10 C.F.R. § 51.26(d). The Board further ruled that scoping meetings on the Generic Environmental Impact Statement (GEIS) satisfied NEPA's site-specific scoping requirements. Id. at 75.

The Commission overruled the Board, recognizing that the scoping exception contained in 10 C.F.R. § 51.26(d) does not apply to site-specific EISs, such as the one at issue here, simply because NRC Staff labels it as a "supplement." CLI-16-20, 84 NRC 219, 235 (JA__). The Commission pointed to a 2013 NRC Office of Inspector General (OIG) "Audit of NRC's Compliance With 10 CFR Part 51 Relative to Environmental Impact Statements," which concluded, with specific reference to the Dewey-Burdock project, that "NRC did not fully comply with the scoping regulations because of incorrect understanding of the regulations related to scoping for EISs that tier off of a generic EIS." OIG-13-A-20 at 24 (JA__).

The OIG Audit confirmed NRC Staff's legal error of "refer[ring] to the tiered site-specific EIS as a 'supplement' to the generic EIS, leading to the belief that the exception in 10 C.F.R. 51.26(d) applies to tiered EISs." 84 NRC at 235. The OIG Audit Report confirms that failing to conduct scoping procedures seriously impacts the subsequent NEPA analysis. OIG-13-A-20 at 17-26 (JA__). The omission of scoping procedures cannot be simply ignored, because if "forgiven because they are merely procedural, there will be nothing left to the protections that Congress intended the Act to provide." *OST*, 896 F.3d at 534.

Nevertheless, the Commission asserted harmless error to excuse NRC Staff's omission of scoping, the first of the three main components of the NEPA

procedures (scoping determinations, draft EIS, and final EIS). 84 NRC at 236. The Commission defiantly opined "that parties challenging an agency's NEPA process are not entitled to relief unless they demonstrate harm or prejudice—and the Tribe has not done so here." Id. The opinion is contrary to law. *OST*, 896 F.3d at 533 (" NEPA – [n]or any other statute that has been called to our attention -- give the NRC authority to forgive 'harmless' violations of NEPA").

As Commissioner Baran recognized in his 2020 dissent, this Court commands that "once the NRC determines there is a significant deficiency in its NEPA compliance, it may not permit a project to continue in a manner that puts at risk the values NEPA protects simply because no intervenor can show irreparable harm." CLI-20-09 at 3 *quoting OST*, 896 F.3d at 523 (JA__). Omitting the scoping procedures and scoping determinations is a not a "failure of precision nor a technicality;" it is a "significant deficiency" that rippled through the NEPA procedures, and is not harmless. Id. at 534.

"Harmless error" cannot be established for omitting specific actions "the lead agency shall" take during the scoping process. 40 C.F.R. § 1501.7(a)(1-7). Draft and Final EIS preparation must adhere to the scoping determinations, unless later revised based on substantial project changes or new circumstances or information that emerges later in the NEPA process. 40 C.F.R. 1501.7(c). Here,

NRC Staff prepared the 2012 DSEIS and 2014 FSEIS without guidance of any scoping determinations.

The failure to conduct scoping also denied the Tribe and public (and this Court) the benefit of 10 C.F.R. § 51.29(b), which requires that NRC Staff "will prepare a concise summary of the determinations and conclusions reached, including the significant issue identified, and will send a copy to each participant in the scoping process." There is no record of NRC Staff making, let alone sending, the scoping determinations, conclusions, or summaries. The procedural omissions deprived Petitioners the opportunity to present concerns about the scoping conclusions and determinations at the proper time ("as soon as practicable")(id.) and to have significant issues identified and addressed within a defined window. See *Hallstrom v. Tillamook County*, 493 U.S. 20, 26-28 (1989) (discussing the importance of giving sufficient notice of an alleged violation to allow the agency to bring itself into compliance with environmental laws).

The scoping omissions also denied the Tribe the opportunity to provide input to help define the proposed action, identify significant issues to be analyzed in depth, provide input on alternatives that NRC Staff proposed to eliminate from study, and ensure that other environmental review and consultation requirements related to the proposed action be prepared concurrently and integrated with the DSEIS. 10 C.F.R. § 51.29(a)(1)-(5); 40 C.F.R. § 1501.7

The Commission's ruling that CEQ regulations do not apply to FSEIS preparation and dismissal of Contention 8 (scoping) based on "harmless error" prohibited the Tribe from presenting evidence and argument on Contention 8 and the harm suffered. This ruling cannot be justified by *post hoc* arguments of counsel to meet the agency's heavy burden to show that NEPA procedural violations across several Contentions can be excused as "harmless error." *OST*, 896 F.3d at 535 *quoting SEC v. Chenery Corp*., 318 U.S. 80, 87-88 (1943). Legal error and significant procedural NEPA deficiencies require the 2013 DSEIS, 2014 FSEIS, ROD, and license must be set aside, and the NEPA process must be conducted with a UMTRCA-compliant application, followed by NEPA scoping procedures and determinations that set out the process for preparing an EIS and license decisions informed by NEPA-mandated "hard look" at impacts, alternatives, and mitigation measures.

CONCLUSION

Based on the foregoing, Petitioners respectfully requests the Court grant this Petition for Review, enter all necessary findings of fact and law, vacate the Final SEIS, Record of Decision, and License for Powertech's Dewey-Burdock Project, and remand this matter to the Commission to comply with its statutory duties.

Respectfully submitted,

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Filed this 19th day of April, 2021.

CERTIFICATE OF COMPLIANCE PURSUANT TO FED. R. APP. P. 32(a)(7)(B)

I hereby certify that the foregoing Initial Opening Brief for Petitioners Oglala Sioux Tribe and Aligning for Responsible Mining contains 12,881 words excluding the parts of the brief exempted by the Federal Appellate and Circuit Rules.

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CERTIFICATE OF SERVICE

I, Jeffrey C. Parsons, hereby certify that the foregoing Initial Opening Brief for Petitioners and accompanying Addendum was served on all counsel of record in case number 20-1489 through the electronic filing system (CM/ECF) of the U.S. Court of Appeals for the District of Columbia Circuit.

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