

[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 REPLY BRIEF OF PETITIONERS
OGLALA SIOUX TRIBE and ALIGNING FOR RESPONSIBLE MINING**

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GLOSSARY

APA	Administrative Procedure Act
EIS	Environmental Impact Statement
NRC	Nuclear Regulatory Commission
NRC Staff	Nuclear Regulatory Commission Staff
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act

SUMMARY OF ARGUMENT

Federal Respondent U.S. Nuclear Regulatory Commission (NRC or Commission) violated the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA), and the Atomic Energy Act in approving a Record of Decision and an active and effective operating license for the Dewey-Burdock *in situ* leach uranium project.

NRC failed to comply with NHPA's requirements for consultation with the Tribe, in part, by failing to identify, evaluate, and mitigate the project's impacts to cultural resources before licensing. NRC blames the Tribe for the NHPA violations, even though the agency improperly: 1) required the Tribe to pay for and execute the survey; and, 2) adopted license conditions that defer identification and mitigation of cultural resources and impacts until after construction.

NRC also failed to correct adjudicated NEPA deficiencies in the 2014 Environmental Impact Statement (EIS), including NRC Staff's failure to conduct a cultural resources survey before issuing the EIS. In turn, NRC's licensing actions were not informed by an EIS that contains the required cultural resources information and reviews. NRC's argument - that its confined administrative litigation process satisfies its NEPA duties - is contrary to binding regulations issued by the Council on Environmental Quality that set forth NEPA procedures ensuring informed decisionmaking and public input before agency action is taken.

NRC violated NEPA, the Atomic Energy Act, and implementing regulations by failing to provide pre-licensing analysis and approval of a plan to store and dispose of solid radioactive wastes, (“byproduct material”) to be generated by the licensed activities. NRC created various exceptions to regulations applicable to all byproduct material created during uranium processing on the basis that the wastes are created at an *in situ* leach facility. NRC’s licensing actions are contrary to law.

NRC’s NEPA failures also include: failure to analyze the impacts and risks associated with thousands of historic abandoned bore holes and geologic faults in the project area; illegal deferral of collection and analysis of baseline water quality data to a post-license and post-NEPA review; inadequate discussion of mitigation measures.; and, failure to conduct mandatory procedural requirements, including the NEPA scoping process.

ARGUMENT

A. Jurisdiction

The final Commission Order consummated the licensing proceeding and constitutes final agency action. NRC_Resp. at 1. NRC incorrectly suggests that jurisdiction is limited to review of final decisions of the Atomic Safety and Licensing Board (“Board”) and Commission. Id.

Final agency action also establishes jurisdiction to review all agency actions and rulings. 5 U.S.C. § 704 (“[a] preliminary, procedural, or intermediate agency

action or ruling not directly reviewable is subject to review on the review of the final agency action.”). If any part of the NRC licensing action is “found to” violate the APA standard of review, the “reviewing court shall [...] hold unlawful and set aside agency action, findings, and conclusions.” 5 U.S.C. § 706(2) *cited by Oglala Sioux Tribe v. NRC* (“*OST*”), 896 F.3d 520, 530 (D.C. Cir. 2018)(discussing relief).

Previously, while the “Staff attempted to resolve [NEPA and NHPA] deficiencies” on administrative remand, this Court lacked jurisdiction over the bulk of the claims presented. *Id.* at 527. Now, jurisdiction also extends to NRC Staff actions and the “Board's finding -- undisturbed by the Commission” that confirmed the 2014 “EIS did not satisfy NEPA” and “NRC Staff had failed to fulfill its [NHPA] responsibilities” before licensing. *OST*, 896 F.3d at 530, 526-527 (citations omitted).

In short, final agency action taken in 2020 establishes jurisdiction over all NRC Staff, Board, and Commission “action, findings, and conclusions” on the 2009 Powertech license application, whether made before the 2015/2016 administrative remand or during administrative remand when NRC Staff decided to forego collection of cultural resource information needed to remedy adjudicated NEPA and NHPA deficiencies. 5 U.S.C. § 706(2).

B. Standard of Review

NRC wrongly asserts that federal courts defer to NRC's interpretation and implementation of NHPA and NEPA duties.¹ NRC_Resp. at 20-21. NRC is entitled to no deference in interpreting NEPA, as that duty is assigned exclusively to the Council on Environmental Quality. *United Keetoowah Band of Cherokee Indians in Okla. v. FCC*, 933 F.3d 728, 738 (D.C. Cir. 2019). Similarly, the NHPA is administered through government-wide regulations developed exclusively by the Advisory Council on Historic Preservation. *Nat'l Mining Ass'n. v. Fowler*, 324 F.3d 752, 757 (D.C. Cir. 2003)(affording no deference to NHPA-regulated agencies).

NRC does not dispute that the Board and Commission found that the Record of Decision, EIS, and license were issued without compliance with NEPA and the NHPA. NRC does not contest the controlling caselaw confirming that vacatur is the standard remedy in this case. See Tribe_Op.Br. at 23. Rather, NRC attempts to evade the plain language of the Administrative Procedure Act ("APA").

NRC_Resp. at 34.

¹ NRC Staff applied the pre-2020 NEPA regulations when preparing the 2014 EIS and making its 2019 determination to forego further cultural resources information gathering. The Board and the Commission rulings also relied on the pre-2020 NEPA regulations. There is no lawful basis to consider the 2020 NEPA regulations in the present litigation. See NRC_Resp. at 29 FN6.

This Court could not have been clearer: “review of this matter is governed by the [APA].” *OST*, 896 F.3d at 530 (citations omitted). Applying the APA standard to NRC’s decisionmaking is well established. *Balt. Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 90 (1983)(applying APA to NRC NEPA process); *New York v. NRC*, 681 F.3d 471, 477 (D.C. Cir. 2012)(finding NRC NEPA violations based on APA standards). Neither NEPA nor NHPA provide any procedural exemption for NRC licensing actions. See *In re Pac. Gas & Elec. Co.*, 67 NRC 1, 13 (2008); 5 U.S.C. § 706(2).

C. Failure to Comply with NHPA

NRC claims NHPA consultation occurred based on a May 16, 2016 introductory face to face meeting, one conference call on January 31, 2017, and a brief exchange of non-substantive letters. NRC_Resp. at 22-23. However, NRC concedes that no cultural resources survey was conducted at the Dewey-Burdock site, although “[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 EIS).

Like pre-2015 consultation, this lack of information precluded the required meaningful consultation on the Tribe’s concerns about already-identified cultural resources, identification and evaluation of additional resources, or participation in

the resolution of the project's adverse effects to cultural resources and historic properties. 54 U.S.C. §§ 302706, 306108, 36 C.F.R. § 800.2.

NRC does not defend the failure to gather information to inform the 2016/17 NHPA discussions. Instead, NRC obscures the lack of informed consultation by characterizing discussions as “regarding” cultural resources. NRC_Resp. at 22. Properly construed, the discussions were limited to the Tribe's explanation that NRC Staff had still not completed a cultural resource survey that could inform NHPA-mandated consultation over identification, evaluation, and mitigation of project impacts.

Instead of conceding that NRC Staff lacked a site-specific cultural resource survey that could support meaningful consultation in 2017, NRC again blames the Tribe, arguing it was given “a reasonable opportunity to provide input regarding the NRC Staff's survey proposal.” NRC_Resp. at 23. Input on a survey proposal that was never implemented does not satisfy NRC's NHPA duty to provide a reasonable opportunity to consult on the actual identification, evaluation, and mitigation of project features that impact NHPA-protected interests.

NRC also faults the Tribe for declining to participate in NRC Staff's 2013 “open site” survey (NRC_Resp. at 24), but ignores that such an approach was held inadequate to satisfy either the NHPA or NEPA cultural resource survey requirements. LBP-15-16, 81 NRC at 654.

NRC further asserts that NHPA obligations were met by presenting an incomplete draft survey methodology to the Tribe's staff in 2019, even though NRC never finalized or implemented the survey. NRC_Resp. at 25. NRC Staff unilaterally cancelled all consultation with the Tribe a mere week after presenting the incomplete draft – without giving the Tribe a reasonable opportunity to provide input. See Tribe_Op.Br. at 24-25.

NRC Staff's refusal to create and implement any competent cultural resource survey precluded meaningful Tribal consultation to determine whether any identified property is National Register eligible. 54 U.S.C. § 302706(a). Without the site-specific information on project and resource locations, whether provided via surveys or otherwise, the Tribe could not meaningfully engage NHPA consultation regarding impacts to cultural aspects of historic properties, identification and evaluation of historic properties, or mitigation for the undertaking's adverse effects on such properties. 36 C.F.R. § 800.2.

NRC Staff unreasonably expected the Tribe's staff and members to conduct the actual on-the-ground survey work, but without pay. NRC_Resp. at 26-28; Tribe_Op.Br. at 31 (summarizing hearing testimony). NRC budgeted \$400,000 for a single agency employee to review reports and conduct administrative work, and \$250,000 for a consultant to help prepare a survey methodology, but allocated no funding to pay Tribal staff or consultants to prepare and conduct the survey or

make subsequent interpretations. NRC_Resp. at 26-27; Exhibit NRC-192 at 4 (JA__).

NRC wrongly asserts that Powertech had agreed to fund the survey. NRC_Resp. at 27. Powertech offered only a \$10,000 transportation and meals honorarium for the Tribe and nothing for Tribal professional staff or qualified cultural resource consultants. See Tribe Op.Br. at 26-27.

NRC's demand that the Tribe carry out the surveys required for NHPA consultation during remand was unreasonable. *Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs*, 985 F.3d 1032, 1048 (D.C. Cir. 2021)(agency "cannot foist its duty to consider such technical matters onto commenters who point out valid deficiencies.").

D. Failure to Comply with NEPA for Cultural Resources

NRC confirms that during remand, it produced "no new impact information" and conducted no NEPA analysis of cultural resources impacts. NRC_Resp. at 29. Instead of performing a cultural resources survey, or otherwise obtaining cultural resources impact information through oral interviews, literature reviews, or other means, NRC relies on the confined administrative hearing instead of the prescribed procedures at 40 C.F.R. § 1502.22 for supplementing the EIS to consider the availability of the cultural resource information. NRC_Resp. at 28-30. As this Court has held, NRC actions that ignore NEPA's procedural rules "vitiates the

statute's action-forcing purpose.” *OST*, 896 F.3d at 520 (quotations omitted).

NRC's approach thwarts the Council on Environmental Quality mandate that all agencies “shall include within the environmental impact statement” justifications as to unavailability of information, summary of evidence, and evaluation using “theoretical approaches or research methods generally accepted in the scientific community.” 40 C.F.R. § 1502.22(b).

NRC provided no opportunity for the public or other interested persons to comment during the formal hearings held after the Board in 2015 confirmed the EIS contained significant deficiencies. Such violations of “NEPA may not be cured by memoranda or reports that are included in the administrative record but are not incorporated into the EIS itself.” *Sierra Club v. Marsh*, 976 F.2d 763, 770 (1st Cir. 1992). Indeed, NRC Staff confirmed its NEPA responsibilities include publication of a supplemental EIS subject to review and comment by the Tribe, the public, other state and federal agencies, and any other interested parties. Exhibit NRC-192 at 4 (JA___). NRC's strategy to avoid NEPA cannot obviate its own conclusion that NRC Staff “‘must conduct a study or survey of tribal cultural resources before granting a license’ in order to fulfill the agency's NEPA responsibilities.” *OST*, 896 F.3d at 531 *quoting* 81 N.R.C. at 653.

Powertech argues that NRC must only make “best efforts” to comply with NEPA and that NRC is not subject to the “substantive requirements” of Council on

Environmental Quality regulations. PT_Resp. at 25, 31. Similarly, NRC contends that its NEPA procedure “is not bound by [Council on Environmental Quality] regulations.” CLI-20-09 at 4,10 (Council “regulations can serve as guidance”)(JA___). Both are contrary to law.

NEPA requires that “all agencies of the Federal Government” shall comply with NEPA procedures, “to the fullest extent possible.” 42 U.S.C. § 4332(2)(C)(ii) *quoted by* Tribe_Op.Br. at 49. All provisions in NEPA’s “Parts 1500 through 1508” 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 Response identifies any statutory barrier to NEPA compliance and federal courts have confirmed that section 1502.22 imposes a “specific procedure” for resolving agency claims of information unavailability. *Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549-550 (8th Cir. 2003). NRC’s failure to follow NEPA procedures is “not in accordance with law,” and such legal error requires the court to “hold the agency’s action unlawful.” *OST*, 896 F.3d at 530 *quoting* 5 U.S.C. § 706(2)(A).

NRC points to previous decisions criticizing use of adjudicatory process to unlawfully supplant a NEPA document that requires public comment and review. NRC_Resp. at 30 *citing* *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). Similarly, the other cases string-cited by NRC, all decided in the 1970’s, offer no quarter, as those cases dealt with regulations specific to nuclear power plants and impact analyses that were effectively included in a NEPA document subject to public comment. *Id.*; see also CLI-20-09 at 4 (Baran dissent recognizing 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”).

NRDC v. NRC avoided a direct ruling on NRC’s use of hearings to substitute for EIS supplementation by making the highly case-specific finding that remand there would be “utterly pointless,” because the evidentiary record already contained the substantive analyses. 879 F.3d at 1212. A critical distinguishing factor confirms relief here is meaningful – the cultural resources surveys and impact/mitigation analysis was not conducted and the public never had a chance to comment on NRC Staff’s 40 C.F.R. § 1502.22 rationale. Vacating the EIS and license, and remanding for compliance with NEPA’s “action-forcing” procedures before licensing, would not be pointless. *OST*, at 896 F.3d at 531-2 (2018) *accord* 45 FR 65521, 65528 (10/3/1980)(“[c]onstruction of a uranium extraction facility or

tailings disposal area should not commence until the NRC has completed its” NEPA duties).

Numerous undisputed declarations confirm relevant information is available from scores of Lakota people with knowledge of the cultural significance of historic and cultural resources that would be impacted by the Dewey-Burdock project. Exhibit INT-023 (JA___). NRC ignores the declarations and wrongly asserts that “Petitioners *concede* that there is no new cultural resources information to report.” NRC_Resp. at 30(emphasis in original). Petitioners made no such concession, and instead pointed to potential sources of information that NRC unreasonably chose to ignore while blaming the Tribe’s principled position on cultural resources surveys for NRC Staff’s decision not to “cure the NEPA deficiencies” on remand. *OST*, 896 F.3d at 526.

NRC failed to address a Commission opinion confirming information needed to cure the EIS may be obtained by hiring independent, qualified cultural resources consultants. 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).

Similarly, NRC misconstrues another case where qualified agency scientists carried out the necessary surveys and analysis, with significant input, participation, and consultation from the relevant tribes. *Ctr. for Biological Diversity v. U.S.*

BLM, 2017 U.S. Dist. LEXIS 137089, at *54-55 (D. Nev. 2017); NRC_Resp. at 33-34. NRC improperly compares itself to the Bureau of Land Management, which hired a contractor to design, carry out, and receive input on a cultural resource survey. *Id.* NRC Staff used its archeology contractor to provide hearing testimony on a draft cultural resources methodology that was never finalized or implemented. Tribe_Op.Br. at 27, 31. NRC, not the Tribe, failed to carry out cultural resource surveys necessary to cure EIS deficiencies. *Standing Rock Sioux Tribe*, 985 F.3d at 1048)(agency “cannot foist its duty [...] onto commenters who point out valid deficiencies”).

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

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 287, 341 n. 272 (JA__). Yet, “NRC Staff has not updated its [EIS] to address the deficiencies identified in LBP-15-16...” *Id.* at 340 (JA__). Instead of pre-license NEPA and NHPA compliance, the Board simply ordered an amendment to the Programmatic Agreement (and thereby the license) to include additional monitoring requirements. *Id.* at 341-345.

The Board’s new license condition received no NEPA analysis or comment, and no NHPA consultation. This *ultra vires* condition merely provides the affected

Tribes a thirty (30) day comment period on the identity of the Powertech-selected monitor, which provides no effective pre-license protection of Lakota cultural resources. *Id.* at 344-345. The Board's post-hearing 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.

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

Without citation, the NRC claims that Petitioners did not raise a "genuine dispute with the EIS" thereby justifying Board and Commission dismissal of Contention 7 that challenged lack of review of byproduct material disposal until post-licensing. NRC_Resp. at 37. Instead of NEPA analysis, the Commission relied on "expected license conditions" to address radioactive waste disposal post-licensing. CLI-16-20, 84 NRC at 233-234. It is not sufficient that license conditions prohibit *operations* until a disposal contract is secured. *Id.* Federal law requires all radioactive wastes be addressed within the Atomic Energy Act/NEPA licensing process "before a license is granted." 45 FR 65521, 65529 (10/3/1980)(preamble to 10 C.F.R. Part 40 regulations, including Appendix A).

The Commission used an erroneous legal standard to reject Contention 7 as not presenting a "substantial question for review." CLI-16-20, 84 NRC at 229-234 (JA__). NRC silently abandons the Commission's erroneous legal standard

(“substantial question”) and offers a *post hoc* rationalization based on the “genuine dispute” standard. NRC_Resp. at 37. As a result, dismissal of Contention 7 and NRC Staff actions taken in 2014 (EIS and license), should be set aside because “[a]n agency must defend its actions based on the reasons it gave when it acted.” *Dep’t of Homeland Sec. v. Regents of the Univ. of Cal.*, 140 S. Ct. 1891, 1909 (2020) (discussing “functional reasons for requiring contemporaneous explanations” and rejecting the “moving target” of *post hoc* rationalizations).

NRC invites the Court and the parties to “chase a moving target” by applying, for the first time in litigation, the contention pleading standard to three Contention 7 pleadings. *Id.* The proper standard merely requires “sufficient *information* to show that a *genuine dispute exists . . .*” **or**, as here, for failure to provide required information, “*identification* of each failure and the *supporting reasons* for the petitioner’s *belief*.” 10 C.F.R. § 2.309(f)(1)(vi)(emphasis supplied). Instead, the Commission found that Petitioner’s pleadings did not “*substantively dispute the analysis of impacts*” in the EIS. 84 NRC at 230 (emphasis supplied). Requiring evidence of a “*substantive*[...] dispute” unlawfully shielded NRC Staff’s failure to address fate of solid byproduct material before issuing the license. 84 NRC at 230-231 (refusing to “revisit” Appendix A exemptions for in-situ licensing).

Each Contention 7 pleading met, and exceeded, the applicable standard. Petition to Intervene at 31-34 (“failure to address disposal requirements for 11e2 byproduct” in the application)(JA__); Contentions on Draft EIS at 27-30 (waste “contention is one of omission”)(JA__); Contentions on Final EIS at 33-38 (waste impacts and analysis omitted from Final EIS)(JA__).

Each iteration of Contention 7 sought review of NRC Staff’s licensing decisions that failed to address storage/disposal impacts, disposal alternatives, and mitigation measures, as required. 45 FR at 65526; 42 U.S.C. § 2113(a)(1); *Kerr-McGee Chem. Corp. v. NRC*, 903 F.2d 1, 7-8 (D.C. Cir. 1990)(Congress intended to “bring previously unregulated radioactive end products of the source material extraction process within the scope of NRC regulation.”). This Court has jurisdiction to “decide all relevant questions” presented in Contention 7 and to set aside offending “agency findings and actions action, findings, and conclusions.” 5 U.S.C. § 706.

1. The License Fails to Address Solid Byproduct Material

“First and foremost the Commission’s Appendix A Criteria are specifically tailored to dealing with disposal of solid 11e.(2) byproduct material.” PT_Resp. at 26. Powertech also confirms that “Powertech’s license also will not allow it to *commence operations* without a disposal contract in place with an appropriately licensed facility.” *Id.* (emphasis supplied).

The license was issued without analysis and approval of permanent disposal of the byproduct material the license allows Powertech to create. NRC_Resp. at 39-40. NRC regulations reject this license now-analyze later approach, noting that “[c]onstruction activities are likely to result in significant and long lasting environmental impacts, the propriety of which cannot be ascertained until these environmental appraisals are completed and documented.” 45 FR at 65526. Regulatory focus was placed on byproduct material creation because “[w]hen construction of a mill begins, including its tailings disposal area, irrevocable commitments are made regarding tailings disposal.” Id.

NRC improperly dismissed Petitioners’ genuine disputes with, and identified omissions in, the application, NEPA documents, and license – each of which lacks an approved, site-specific disposal plan for solid byproduct material created pursuant to the license.

2. NRC Exempted Dewey Burdock Application from Portions of the Part 40 Regulations and Appendix A

NRC’s Response identifies no exception allowing issuance of a license to construct a facility that creates solid byproduct material before compliance with all licensing procedures for creation, storage, and disposal of solid byproduct material. 10 C.F.R. § 40.3; 10 C.F.R. Part 40, Appendix A.

NRC’s Response attempts, for the first time in litigation, to revoke the requirement that “[e]ach application must clearly demonstrate how the

requirements and objectives set forth in appendix A of this part have been addressed,” by limiting the entire regulation, and thus the entire Appendix A, to “sites formerly associated with [uranium and thorium] milling.” NRC_Resp. at 38 *characterizing* 10 C.F.R. § 40.31(h). This is error. The Part 40 standards and Appendix A apply to all license applications involving creation of byproduct materials while processing uranium.

Section 40.31 of Part 40 is amended by adding a new paragraph [(h)]² to require applicants for mill licenses to propose written specifications relating to the operation of mills and disposition of tailings or wastes to achieve requirements and objectives set forth in a new Appendix A to 10 CFR 40.

45 FR at 65529. This preamble further explains that failure to clearly demonstrate compliance with Appendix A “will be grounds for refusing to accept an application for a license.” *Id.* (emphasis supplied).

The preamble also confirms that NRC Staff must issue “a positive finding” on Appendix A standards in an EIS because,

each mill tailings pile constitutes a low-level waste burial site containing long lived radioactive materials [... and therefore] prudence requires that specific methods of tailings disposal [...] be worked out and approved before a license is granted.”

Id. (emphasis supplied). Prudence requires vacatur of an EIS and license that defer disposal decisions until after construction. PT_Resp. at 26.

²As originally published, the current subsection (h) was incorrectly designated as (g), and later corrected. 46 FR 13497. For consistency, this Brief uses the corrected citations and references to 10 C.F.R. § 40.31(h).

NRC's attempt to reinterpret the inartful 40.31(h) regulation to exclude applications to create new byproduct material from Part 40 Appendix A would upset the statutory command that imposes these requirements on any "license [...]for any activity which results in the production of any byproduct material" and "for sites (A) at which ores were processed primarily for their source material content *and* (B) at which such byproduct material is deposited." *Atlas Corp. v. United States*, 895 F.2d 745, 748 (Fed. Cir. 1990) (emphasis supplied)(discussing purpose of 42 U.S.C. § 2113(a)(1)). The language of the statute and regulations do not support limiting Part 40 licensing provisions or application requirements to pre-existing sites.

NRC seeks to treat Powertech's byproduct material disposal differently by virtue of being created during *in situ* leach operations. NRC_Resp. at 37. No such exception exists in the statute, or any duly adopted regulation. An *in situ* exception conflicts with the two-fold intent of Congress that "subject[s] uranium and thorium mill tailings to the NRC's licensing authority" to ensure "a comprehensive regulatory regime for the safe disposal and stabilization of the tailings." *Kerr-McGee Chem. Corp.*, 903 F.2d at 3 (rejecting NRC distinctions between wastes); *Nuclear Info. & Res. Serv. v. NRC*, 509 F.3d 562, 569 (D.C. Cir. 2007)(NRC licensing EIS must "thoroughly consider[] the environmental issues surrounding uranium waste disposal.").

NRC forwards *Hydro Resources* and 10 C.F.R. § 40.31 to justify the decision to ignore statutory licensing requirements at *in situ* facilities. NRC_Resp. at 38 citing *Hydro Resources, Inc.*, LBP-99-1, 49 NRC 29, 33 (1999), *Hydro Resources, Inc.*, CLI-99-22, 50 NRC 3, 8 (1999). *Hydro Resources* concerned a dispute over application of Part 40 and Appendix A to liquid and aerosol wastes at an *in situ* leach uranium project. Here, there is no dispute that Powertech's proposed activities create solid byproduct material that triggers Part 40 licensing mandates. 42 U.S.C. § 2113(a).

NRC argues that *Hydro Resources* creates a general *in situ* leach exception from Part 40 and Appendix A. NRC_Resp. at 38. *Hydro Resources* provides no such exception, relying instead on individual licensees to request and justify any exemptions. *Hydro Resources, Inc.*, 50 N.R.C. at 9 (“Until the Commission develops regulatory requirements specifically dedicated to the particular issues raised by [*in situ*] mining, we will have no choice but to follow the case-by-case approach taken by our Staff in issuing HRI's license.”).

A generally applicable *in situ* leach exception to Part 40 or Appendix A does not exist, and a case-specific exception was not created in the Powertech matter. While NRC's regulations allow some provisions to be “waived or an exception be made for the particular proceeding,” Powertech did not file any petition identifying

“special circumstances” and NRC Staff entered no such findings. 10 C.F.R. § 2.335(b).

Part 40 licensing and Appendix A do not contemplate any licensing exception based on the processing technologies that create byproduct material. PT_Resp. at 26. Instead of an exemption, Criterion 2 provides guidance supporting analysis and licensing off-site disposal of “byproduct material from in situ extraction operations.” 45 FR 65521, 65533. NRC was aware of the distinction between conventional and *in situ* production and provided no exception to the prudent requirement that “tailings disposal [...] and arrangements to allow for transfer of site and tailings ownership be worked out and approved before a license is granted.” 45 FR 65521, 65529.

Last, NRC relies on Utah’s licensing duties instead of the Dewey-Burdock EIS. NRC_Resp. at 40. Because no hearing was held on Contention 7, there is no evidence to establish the physical condition or licensing status of the White Mesa Mill. Instead, NRC Staff approved the license without working out Powertech’s tentative plan for indefinite onsite storage, followed by transport and permanent disposal of solid byproduct material at White Mesa. Id.

By delaying disposal analysis, NRC violated the “duty of insuring that the management of any by-product material at ‘active sites’ (i.e., sites currently under NRC license and new sites licensed in the future), is carried out in such manner as

conforms to applicable general standards promulgated by” EPA and NRC regulations. *Am. Mining Cong. v. United States Nuclear Regulatory Com.*, 902 F.2d 781, 782-83 (10th Cir. 1990)(describing Part 40 regulations).

3. Solid Byproduct Material Storage and Disposal was not Subjected to NEPA Analysis

Without citation, NRC asserts that Petitioner did not address the relevant dismissal rulings. NRC_Resp. at 43. APA-based judicial review encompasses all actions, including the application review, scoping determinations, Draft EIS, Final EIS, and license, as well as the rationale used by numerous orders that dismissed Contention 7. 5 U.S.C. § 704, 706(2)(A). During APA review of NEPA claims, “[a]n agency must defend its actions based on the reasons it gave when it acted.” *Dep’t of Homeland Sec.*, 140 S. Ct. at 1909.

Petitioners challenged the Draft EIS and Final EIS by filing a NEPA “contention alleging inadequate analysis of direct, indirect, and cumulative impacts of disposal of byproduct material.” 84 NRC at 230. Instead of adjudication, NRC left the EIS intact on the Commission’s “expectation that the license would include conditions regarding waste disposal.” *Id.* at 233.

NRC points to the Draft EIS to rationalize its NEPA decisions, but ignores the contents of the Final EIS. NRC_Resp. at 44. The Final EIS states the “potential impacts of generating and disposing of these types of waste are detailed in SEIS Section 4.14.” EIS at 2.1.1.1.6 (Effluents and Waste Management)

(JA____). Section 4.14 contains a series of conclusory statements and no analysis of the Dewey-Burdock project. For example, the EIS concludes that due to “potential limitations on available byproduct material disposal capacity, it is anticipated that the potential impacts on waste management from decommissioning the radium settling basin(s) and other storage facilities associated with treating wastewater for surface water discharge would range from SMALL to MODERATE.” EIS at 4-212 (JA ____).

Section 4.14 contains no *analysis* of permanent solid byproduct material disposal impacts or disposal alternatives beyond requiring Powertech to sign a disposal contract. *Id.* at 3-116 (JA____). The EIS asserts the “applicant assumes it will obtain an agreement for disposal of byproduct material at the White Mesa site in Blanding, Utah, which is detailed in SEIS Section 3.13.” *Id.* at 2-54 (JA____.) Section 3.13, like the remainder of the Final EIS, contains no NEPA analysis of impacts or the “decontamination, decommissioning, and reclamation standards” that apply to Powertech activities that “results in the production of any byproduct material.” 42 U.S.C. § 2113(a)(1).

NRC rationalizes deferral of NEPA analysis based on “NRC’s regulatory determination not to require a specific disposal plan in the license application.” NRC_Resp. at 45 (citations omitted). NRC cites no petition or finding to support a “regulatory determination” to forego NEPA analysis of a disposal plan. Instead,

NRC cites to the Generic EIS and unrelated adjudications to rationalize a non-existent NEPA exception for byproduct material created by *in situ* uranium leach facilities. Id.

NRC fails to address this Court's analysis and reasoning in *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012) that compelled NRC to apply NEPA to the waste confidence rulemaking. Instead of using NEPA-informed APA rulemaking, the Powertech licensing effectively rewrites the Part 40 regulations to exempt storage and disposal of *in situ* leach byproduct material from site-specific NEPA analysis.

The NEPA/APA violation in the waste confidence rulemaking was eventually remedied on remand. NRC_Resp. at 41-42 *citing New York v. NRC*, 824 F.3d 1012, 1019-20 (D.C. Cir. 2016). Here, however, there is no NEPA analysis and no APA rulemaking to support a "regulatory determination" exempting *in situ* leach licensing from NEPA analysis or regulations concerning byproduct material. See e.g. 10 U.S.C. § 2113(a)(2)(mandatory ownership transfer); 10 C.F.R. Part 40, Appendix A, Criterion 2, 11(C); Criterion 10 (long term care surety). Like the waste confidence rule, NEPA compliance must precede licensing and construction, when "irrevocable commitments are made regarding tailings disposal." 45 FR 65521, 65529. The nebulous "regulatory determination" to forego disposal licensing and NEPA analysis is contrary to law.

NRC's licensing process ignored the "inescapable fact that the tailings will, in fact, remain hazardous for extremely long periods of time, hundreds of thousands of years." 45 FR at 65525. Significant risks posed by byproduct material warrant setting aside all NRC Staff actions, with remand, thereby "ensuring that parties and the public can respond fully and in a timely manner to an agency's exercise of authority." *Dep't of Homeland Sec.*, 140 S. Ct. at 1909 (2020)

G. Failure to Adequately Analyze the Groundwater Quality Impacts Associated with the Thousands of Abandoned Boreholes and Faults at the Site

NRC unlawfully relies on a new license condition requiring post-licensing data gathering and analysis to remedy a pre-licensing NEPA deficiency regarding hydrogeological information. NRC Resp. at 46, see 84 NRC at 226, 269 n. 2 (Baran Dissent).

NRC excused the omission of NEPA hydrogeological analysis before licensing as a "harmless" error. NRC_Resp. at 47-48. Refusing to conduct NEPA analysis before acting is not harmless. *OST*, 896 F.3d at 523 (NEPA "does not permit an agency to act first and comply later."). Moreover, NRC disavowed any plan to comply later. See e.g., EIS at E-51 ("The commenter is correct in stating that wellfield hydrogeologic data packages will not be made available for public review.")(JA__).

NRC again argues that administrative rulings altered the Part 40 regulations by substituting post-construction data gathering for pre-licensing NEPA analysis for *in situ* leach proposals. NRC_Resp. at 49. No deference should be afforded NRC's use of licensing hearings to steadily erode the 1980 regulations. *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016)(no deference when rulemaking procedures not followed). NRC may indeed need to conform the 1980s-era regulations to *in situ* leaching, but it must do so through APA notice and comment rulemaking, informed by NEPA analysis. *New York v. NRC*, 681 F.3d at 477.

NEPA does not allow NRC to defer hydrogeological analysis until after site-specific licensing, outside the NEPA process. *OST*, 896 F.3d at 523. Vacatur and remand is proper, based on NRC's recognition that "one of the few most important matters which determine what is an acceptable site is the matter of groundwater protection." 45 FR at 65529.

H. Failure to Adequately Analyze Water Quality Baseline

Instead of NEPA, NRC relies on an "industry practice" that delays groundwater baseline determinations until after licensing. NRC_Resp. at 50 *citing* 84 NRC at 252. Delaying NEPA analysis until after licensing is illegal. *OST*, 896 F.3d at 523.

NRC ignored Petitioners' cases establishing the purpose of baseline data, argues that groundwater data is not available until the *in situ* production wellfield is installed and operating. NRC_Resp. at 51. Nothing in the administrative record supports the notion that sampling required to establish groundwater baseline data cannot be conducted by installing a small number of wells. 40 C.F.R. § 1506.1(c-d)(setting out procedures to approve "work necessary to support an application").

[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).

NEPA prohibits NRC's post-licensing approach to establishing groundwater baselines. *OST*, 896 F.3d at 523.

I. Failure to Adequately Review Mitigation Measures

NRC provides no citation to supposedly "extensive" mitigation analysis in the Final EIS. NRC_Resp. at 52. NEPA compliance must be achieved within the Final 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 EIS listing of mitigation measures does not meet NEPA's mandate. *Id.*

A reader looking for mitigation analysis would rightly follow the table of contents to the "Mitigation" section.

6	MITIGATION.....	6-1
6.1	Introduction.....	6-1
6.2	Mitigation Measures Proposed by Powertech.....	6-2
6.3	Potential Mitigation Measures Identified by the U.S. Nuclear Regulatory Commission.....	6-13
6.4	References.....	6-18

EIS at xv. The Mitigation section simply lists and mentions mitigation measures and asserts, without support, as-yet non-existent mitigation measures that might eliminate or substantially reduce adverse impacts. EIS at 6-1 through 6-19 (JA___). The proposals would be considered and adopted, if at all, outside the NEPA process. Id.

Instead of defending the mitigation analysis, NRC points to section 4 of the Draft EIS, which contains the impacts analysis. NRC_Resp. at 52-55. Each subsection contains a snippet simply stating that mitigation measures will be used and provides no analysis of the potential effectiveness in eliminating or reducing impacts. EIS at Section 4 (JA___).

The EIS does not inform the public or decisionmakers of “appropriate mitigation measures” that may reduce or eliminate adverse environmental impacts. 40 C.F.R. § 1502.16(h); 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.” *NRDC, Inc. v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988)(rejecting mere mention that protected species may be exposed to risks of oil spills). NRC

concedes the EIS was finalized while NRC Staff and the applicant were still considering mitigation measures. See Tribe_Op.Br. at 51-52.

Last, NRC mischaracterizes the Tribe's argument as requiring "fully developed mitigation plans." NRC_Resp. at 55. NEPA compliance requires "reasonably complete discussion of possible mitigation measures," instead of NRC's plans to address mitigation after licensing, outside of the NEPA process, shielded from public review or comment. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989). There is no dispute that an EIS that does not analyze the effectiveness of possible mitigation measures is contrary to law. Id.

J. Failure to Follow Promulgated NEPA Regulations

"Scoping" was not used to inform the site-specific NEPA analysis. NRC_Resp. at 56. NRC Staff omitted NEPA scoping because it believed it was preparing a "supplemental" EIS that did not require scoping. Tribe_Op.Br. at 56-57. Although NRC's omission of scoping procedures was clearly contrary to law, the Commission's order dismissing Contention 8 "found the Board's error (and the NRC Staff's underlying procedural error) harmless." NRC_Resp. at 56. Because Contention 8 was dismissed without hearing, the administrative record contains no evidence supporting harmless error. Id. *Dep't of Homeland Sec.*, 140 S. Ct. at 1909 (2020)(setting aside agency action and rejecting the agency's *post hoc* rationalizations).

Although NRC cites fact-specific District Court opinions for the proposition that omitting “scoping” procedures is not *per se* fatal, NRC provided no opportunity to build a record in the present case. *Id.*; 40 C.F.R. § 1508.25 (scoping “determine[s] the scope of environmental impact statements”).

Exclusion of scoping, alone or combined with the other NEPA deficiencies, warrants vacatur of the EIS, Record of Decision, and license. *Standing Rock Sioux Tribe*, 985 F.3d at 1052. There is no disruptive effect because vacatur is the default response to a fundamental procedural failure. *Id.* NRC refused to follow scoping and other NEPA procedures that “all Federal agencies” must follow before taking action. 40 C.F.R § 1500.3(emphasis supplied).

Compounding the Commission’s assertion of harmless error on a bare record, NRC did not defend the Commission’s defiant statement “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.” 84 NRC at 236; *compare 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”).

CONCLUSION

Petitioners respectfully request the Court vacate all agency action, including the FSEIS, ROD, and License, and remand this matter for action consistent with the Court's findings.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE PURSUANT TO FED. R. APP. P. 32

I hereby certify that the foregoing Reply Brief for Petitioners contains 6,453 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 Reply Brief for Petitioners 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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