

NEPA: A Tool for Tribes Challenging Nuclear Regulatory Commission Licensed Uranium Extraction Projects

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*Native American tribes have an extensive history of resisting uranium extraction on and near their reservations. Over the years, tribes have employed a myriad of approaches to combat efforts to license new uranium extraction projects. These efforts include pursuing extraction bans, advancing human rights violation arguments, and intervening on project licensing proceedings before the Nuclear Regulatory Commission. During the licensing proceeding for the Dewey Burdock Project, the Oglala Sioux argued that the Nuclear Regulatory Commission violated the National Environmental Policy Act when it failed to adequately consider the project's impacts on the tribe's cultural resources. In a surprising decision in *Oglala Sioux v. Nuclear Regulatory Commission*, the D.C. Circuit sided with the tribe and agreed that the Nuclear Regulatory Commission failed to comply with National Environmental Policy Act's cultural resource analysis requirement. Indeed, the Oglala Sioux had a similar experience before the Atomic Safety and Licensing Board when it intervened in the Crow Butte licensing proceeding. Although the court did not revoke the license, the decision has impaired the project's progress. In a time when tribes have had difficulties challenging all sorts of extraction projects that affect their quality of life, the D.C. Circuit case's outcome can be viewed as a success story for tribes. The question then is: why was the Oglala Sioux's cultural resource challenge so effective? In this Note, I argue that the Nuclear Regulatory Commission's structure, norms, and rules both facilitated tribal challenges to extraction projects on cultural resource grounds and limited tribal success with National Environmental Policy Act ecological resources challenges.*

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INTRODUCTION

As governments around the globe contend with climate change, the stirrings of a nuclear energy industry revival loom. Scientists and climate experts identified greenhouse gas emissions as a major contributor to climate change.¹ While advocates often turn to renewable energy sources such as solar and wind power to address climate change, some advocates now recommend nuclear energy because its use does not increase the amount of greenhouse gases released into the atmosphere.² However, a preference for nuclear energy use could give rise to conflict for Native American tribes. Approximately 60 percent of uranium deposits in the United States are located on or near Native American lands³ and

1. Naomi Oreskes, *The Scientific Consensus on Climate Change*, 306 SCIENCE 1686, 1686 (2004).

2. Editorial Board, *A Warming World Needs Nuclear Power*, BLOOMBERG (Dec. 31, 2018, 6:44 AM), <https://www.bloomberg.com/opinion/articles/2018-12-31/nuclear-power-is-part-of-the-solution-to-climate-change>.

3. BRUCE JOHANSEN & BARRY M. PRITZKER, *ENCYCLOPEDIA OF AMERICAN INDIAN HISTORY* 183 (2008).

“over ninety percent of all milling⁴ done in the United States occurred on or just outside the boundaries of American Indian reservations.”⁵ Consequently, Native American lands face an increased risk of exploitation from uranium mining activities if nuclear energy production becomes a preferred climate change solution.

Native American tribes across the nation are resisting efforts by corporations and federal agencies to license and construct nuclear energy projects that threaten to damage the environment. For several decades, the Navajo Nation has resisted uranium extraction projects that adversely impacted the health of reservation residents.⁶ More recently, the Havasupai and Oglala Sioux tribes also resisted mining projects planned near their sacred sites around the Grand Canyon and near the Black Hills of South Dakota.⁷

However, several impediments make it difficult for tribes to challenge uranium extraction projects that threaten their natural and cultural resources.⁸ First, many tribes lack the financial resources required to engage in prolonged legal battles over their natural and cultural resources. Second, tribes face opposition from corporations seeking to develop nuclear energy projects. Third, tribes have difficulty persuading federal agencies to respond to concerns over energy project impacts on tribal resources.

Despite these challenges, the Oglala Sioux Tribe (the Oglala Sioux) may have found a useful tool of resistance in the National Environmental Policy Act (NEPA). In a recent D.C. Circuit case, *Oglala Sioux v. Nuclear Regulatory Commission*, the Oglala Sioux used NEPA to resist a uranium extraction project near their native lands. The controversy involved efforts by Powertech, U.S.A.

4. “Uranium milling” is “one of the two primary recovery methods that are currently used to extract uranium from mined ore.” *Conventional Uranium Mills*, U.S. NUCLEAR REGULATORY COMM’N, (May 15, 2017), <https://www.nrc.gov/materials/uranium-recovery/extraction-methods/conventional-mills.html>. “A conventional uranium mill is a chemical plant that extracts uranium” from uranium ore delivered to a processing facility. *Id.*

5. Anita Moore-Nall, *The Legacy of Uranium Development on or Near Indian Reservations and Health Implications Rekindling Public Awareness*, 5 *GEOSCIENCES* 15, 22 (2015). According to the U.S. Energy Information Administration, “about 7 [percent] of the uranium delivered to U.S. reactors in 2017 was produced in the United States and 93 [percent] came from other countries,” including Canada, Australia, Russia, Kazakhstan, and Uzbekistan. This figure only covers U-235 uranium which is used as reactor fuel; it does not include uranium used for other purposes. While the United States has been able to source material in the past, the availability of uranium may turn on the maintenance of political relationships. See *Nuclear Explained: Where Our Energy Comes From*, U.S. ENERGY INFORMATION ADMINISTRATION, (Sept. 26, 2018), https://www.eia.gov/energyexplained/index.php?page=nuclear_where. President Donald Trump’s recent announcement that the United States will pull out of the Intermediate-Range Nuclear Forces Treaty may impact imports. See James Doubek, *U.S. To End Cold War-Era Nuclear Arms Treaty With Russia*, *Trump Says*, NPR (October 21, 2018), <https://www.npr.org/2018/10/21/659275572/u-s-to-end-cold-war-era-nuclear-arms-treaty-with-russia-trump-says>.

6. See Part II below for a discussion of tribal resistance to uranium extraction projects.

7. See Part II.

8. For the purposes of this paper, “cultural resources” refer to religious sites, sacred sites, burial grounds, and other similar sites.

(Powertech) to license a uranium extraction project near the Black Hills in South Dakota called the “Dewey-Burdock Project” (DBP). The Oglala Sioux intervened during the second stage of the Nuclear Regulatory Commission’s (NRC) licensing proceeding, arguing that the Environmental Impact Statement (EIS) prepared by the NRC was inadequate for several reasons. Of particular importance to this paper, the Oglala Sioux argued that the EIS’s analysis of how the projects would impact cultural resources was inadequate.⁹ The D.C. Circuit held that the NRC may not allow a project to continue to violate NEPA after the agency determines that there is a significant deficiency in its NEPA compliance.¹⁰

Three key themes arise from both the D.C. Circuit opinion and the NRC proceedings involving the Powertech mining license dispute. First, this case reaffirms the status of NEPA as a tool for the protection of Native American cultural resources. The Oglala Sioux’s NEPA challenges persuaded both the NRC’s review board and the court that the project was not NEPA compliant because of the inadequate cultural resource survey.¹¹ While the remedy the court granted to the Oglala Sioux (remand to the NRC) was not the remedy requested, the remedy did halt construction, and as such, the D.C. Circuit opinion may be viewed as a success story for the Oglala Sioux.¹² NEPA made it possible for the Oglala Sioux to inform, delay, and intervene on major development projects impacting traditional tribal lands.¹³

Second, while *Oglala Sioux v. NRC* affirms NEPA’s status as a tool for tribal efforts to protect sacred lands, it also underscores limitations on the Oglala Sioux’s ability to use NEPA to preserve those lands. NEPA is not an absolute license for tribes to disrupt any and all NRC-licensed extraction projects. This case demonstrates that agencies like the NRC have the power to shape how NEPA challenges are viewed and addressed. For example, the NRC has significant control over the methodologies used to conduct the cultural resources analyses required under NEPA.

Third, this controversy illustrates that it may be easier for tribes to challenge uranium extraction projects on cultural resource grounds rather than on ecological resource grounds. For example, the Oglala Sioux used NEPA to acquire appellate court review of the NRC’s cultural and historical resource

9. *Oglala Sioux v. Nuclear Regulatory Comm’n*, 896 F.3d 520, 525 (D.C. Cir. 2018).

10. *Id.* at 538.

11. *Id.* at 531 (stating that the Court accepted the Board’s finding that the agency did not fulfill its NEPA responsibilities); *see also id.* at 525 (citing the ASLB Initial Decision, 81 N.R.C. at 665 (J.A.507-09)).

12. *See id.* at 538.

13. Given a review of the case and the underlying documents, it is unclear whether license revocation alone would halt construction. The Oglala Sioux claimed that Powertech could begin construction without the license. *Id.* The Court claimed that construction could not commence without NEPA compliance because of South Dakota’s construction requirements. *Id.* If this turned out not to be true, the Court agreed to intervene if construction commenced before the NEPA violation is cured. *Id.*

analyses but failed to secure review of the NRC's conclusions on the ecological¹⁴ aspects of the development (including water quality and pollution control measures).

Those interested in replicating the Oglala Sioux's success in this case need to understand the catalysts for these decisions by the NRC and the D.C. Circuit. I argue that the NRC's structure, norms, and rules facilitated tribal challenges to extraction projects on cultural resource grounds and limited tribal success with NEPA ecological resources challenges. To develop this argument, I (1) describe the NRC and discuss its history, (2) review historic and contemporary tribal strategies for resisting uranium mining, (3) explain NEPA requirements, (4) outline the contours of the DBP proceeding and the related Crow Butte Project (CBP) controversy, and (5) analyze how the NRC's structure, norms, and rules advance or limit the ability of Native American tribes to resist uranium mining projects using NEPA challenges. In so doing, I suggest that tribes may have more difficulty challenging projects on ecological resource grounds than on cultural resource grounds because of the NRC's internal dynamics. At the end of the paper, I conclude by discussing the implications of my analysis and identifying areas for further research.

I. BACKGROUND

A. *The Nuclear Regulatory Commission*

The NRC is an independent federal agency created after the Energy Reorganization Act of 1974 eliminated its predecessor agency, the Atomic Energy Commission (AEC).¹⁵ The NRC's regulatory activities involve oversight of reactor licensing, materials safety oversight, materials licensing, and waste management of high- and low-level waste.¹⁶ Materials licensing at the NRC includes licensing of uranium mining projects like the in-situ recovery (ISR) project at issue here.¹⁷

14. For the purposes of this paper, "ecological aspects" refer to natural resources including water quality, soil quality, air quality etc. "Ecological aspects" do not include resources made by humans, like historic religious sites or burial sites.

15. *History*, U.S. NUCLEAR REGULATORY COMM'N, (Jan. 28, 2019), <https://www.nrc.gov/about-nrc/history.html>.

16. *Organization and Functions*, U.S. NUCLEAR REGULATORY COMM'N, (July 16, 2018), <https://www.nrc.gov/about-nrc/organization.html>.

17. The NRC does not regulate uranium mining projects in all states. Specified "agreement states" are not regulated by the NRC, but by states. "Agreement States" are states that entered into agreements with NRC that grant the authority to license and inspect byproduct, source, or special nuclear materials used or possessed within their borders. *Agreement State Program*, U.S. NUCLEAR REGULATORY COMM'N, (Dec. 14, 2018), <https://www.nrc.gov/about-nrc/state-tribal/agreement-states.html>. There are few non-agreement states, but South Dakota is one. *Office of Nuclear Material Safety and Safeguards*, U.S. NUCLEAR REGULATORY COMM'N, (Apr. 10, 2019), <https://scp.nrc.gov/>.

Like most federal agencies, the NRC has weathered its fair share of criticism, including claims that the agency suffers from “agency capture.”¹⁸ “Captive agency theory” states that administrative agencies “have a tendency to move so far in the direction of accommodating the interests of the entities they are charged with regulating that ultimately these agencies may be fairly considered a ‘captive’ of those regulated firms.”¹⁹

There are a number of reasons why NRC critics believe the agency is afflicted by agency capture. The first reason lies in the agency’s history. Before the NRC was created, the AEC was charged with conducting research, ensuring nuclear safety, and promoting atomic energy development.²⁰ These competing objectives made it difficult for the agency to execute all of its functions with fidelity.²¹ Consequently, Congress passed the Energy Organization Act of 1974, which allocated the AEC’s functions to new separate agencies,²² including the NRC. The NRC’s inception was part of an effort to separate nuclear energy promotion from nuclear energy regulation.²³ However, old problems persisted after the agency shake-up was implemented.

The NRC’s deference to the regulated community also leads critics to believe that the agency is captured. “Safety experts, Congressional critics[,] and even the agency’s own internal monitors say the NRC is prone to dither when companies complain that its proposed actions would cost time or money.”²⁴ The NRC’s deference has led to delays in rulemaking, inspections, and enforcement. Some of these delays nearly led to major accidents that could have been caught sooner if the NRC followed its regulatory protocols in a timely manner.²⁵

The NRC also struggles with its efforts to effectively communicate with tribes about new projects. An administrative judge recently rebuked the agency for the way it communicated with tribal groups. The criticisms reflected the NRC’s lack of cultural competency as well as professional courtesy, as the agency failed to forward important communications to the Oglala Sioux’s legal

18. JOEL MINTZ, ENFORCEMENT AT THE EPA: HIGH STAKES AND HARD CHOICES 203 (2012).

19. *Id.*

20. *History*, *supra* note 15.

21. *See id.* (“[b]y 1974, the AEC’s regulatory programs had come under such strong attack that Congress decided to abolish the agency. Supporters and critics of nuclear power agreed that the promotional and regulatory duties of the AEC should be assigned to different agencies.”).

22. *Id.*

23. The Atomic Energy Act of 1954 made the AEC responsible for both promoting and regulating nuclear energy. *See* J. SAMUEL WALKER, CONTAINING THE ATOM: NUCLEAR REGULATION IN A CHANGING ENVIRONMENT 2 (1992). By the 1970s, the AEC’s programs came under so much scrutiny that “Congress decided to abolish the agency.” According to the NRC, both supporters and critics argued that the “promotional and regulatory duties of the AEC should be separated.” *See History*, *supra* note 15.

24. Tom Zeller Jr., *Nuclear Agency Is Criticized as Too Close to Its Industry*, N.Y. TIMES (May 7, 2011), <https://www.nytimes.com/2011/05/08/business/energy-environment/08nrc.html>.

25. *Id.*

counsel, causing substantial time delays during the proceedings.²⁶ In response to the court's criticisms, the NRC enacted a tribal policy statement in 2017 including the following principles:

- the NRC recognizes the federal trust relationship with and will uphold its trust responsibility to Indian tribes;
- NRC recognizes and is committed to a government-to-government relationship with Indian tribes;
- the NRC will conduct outreach to Indian tribes;
- the NRC will engage in timely consultation;
- the NRC will coordinate with other federal agencies; and
- the NRC will encourage participation by state-recognized tribes²⁷

The agency published a revised tribal protocol manual incorporating these principles.²⁸ The publication of the NRC policy manual suggests that the agency's relations with Native American tribes need improvement.

While tribes like the Oglala Sioux have worked with the NRC directly to address their concerns about uranium mining projects, the history of tribal resistance to uranium mining projects involves more parties and agencies than just the NRC alone.²⁹ Below, I discuss a few efforts to resist uranium mining, highlighting the strategies employed by the particular tribes involved.

B. Tribal Resistance to Uranium Extraction Projects

Tribes have an extensive history of resistance towards uranium mining on and near reservations. Long-term resistance efforts by the Navajo Nation and more recent efforts by the Havasupai illustrate the problems posed by uranium mining and highlight the various strategies tribes have employed to overcome those problems. This paper discusses the resistance efforts of these tribes in addition to the Oglala Sioux.

1. The Navajo Nation

The Navajo Nation's efforts to resist uranium extraction projects in the Southwest are extensively documented. In 1948, the first corporation to begin commercial mining operations on Navajo lands, the Kerr-McGee Company, favored the area not only because of the uranium reserves but also because the reservation offered cheap labor, no taxes, and few health and safety regulations.³⁰ Extraction operations on the reservation led to the destruction of

26. See *In the Matter of Powertech USA, Inc.*, ASLBP No. 10-898-02-MLA-BD01 (ASLB Oct. 19, 2017), (Order Granting Summary Disposition as to Contention 1B, Denying Summary Disposition as to Contention 1A).

27. U.S. NUCLEAR REGULATORY COMM'N, NUREG-2173 TRIBAL PROTOCOL MANUAL: TRIBAL POLICY STATEMENT 5 (2017).

28. See *id.*

29. See *History*, *supra* note 15.

30. JOHANSEN & PRITZKER, *supra* note 3, at 184.

some Navajo Nation land. For example, one of the largest radioactive spills in U.S. history occurred on Navajo Nation land.³¹ In 1979, the Church Rock, New Mexico uranium mill tailings disposal pond breached its dam,³² releasing “over 1,000 tons of solid radioactive mill waste and ninety-three million gallons of acidic, radioactive tailings solution flowed into the Puerco River.”³³ The contamination flowed downstream to Navajo Nation lands, exposing tribe members to toxic waste that contaminated soil and water sources. Today, the reservation is home to “more than 1000 mines and four uranium mills.”³⁴

The degradation of Navajo Nation lands prompted resistance efforts from Native American activist groups. In the 1970s, Native American political groups, such as Coalition for Navajo Liberation and the National Indian Youth Council, began to organize resistance to uranium mining projects. In 1978, the Coalition for Navajo Liberation began documenting deaths from cancer related illnesses.³⁵ Moreover, Citizens Against Nuclear Threats joined forces with the National Indian Youth Council to oppose uranium mining by collecting data and organizing opposition. The information gathered indicated that “radium-bearing sediments had spread into the Colorado River Basin.”³⁶

By 2005, the Navajo Nation passed its own law “prohibiting uranium mining within its borders.”³⁷ Since then, the tribe has pushed back on new projects located near its reservation. In 2011, the Navajo Nation fought a uranium extraction project near the reservation originally licensed in 1999 by the NRC.³⁸ However, this time, the Navajo Nation employed an international human rights strategy. Together with the New Mexico Environmental Law Center, Eastern Navajo Diné Against Uranium Mining submitted petitions to the Inter-American Commission on Human Rights contending that the NRC’s decision to grant a license to mine near their communities violated international laws.³⁹ The Navajo Nation’s challenge to the NRC license was also litigated, but the Supreme Court denied certiorari, leaving in place a Tenth Circuit decision holding that the “NRC had adequately considered the potential effects of the project in its analysis and

31. Sara Blakeslee, *Cleanup Crews Still Working on Radioactive Spill*, WASH. POST (Sept. 5, 1979), https://www.washingtonpost.com/archive/politics/1979/09/05/cleanup-crews-still-working-on-radioactive-spill/0ca43dbd-12c5-4855-b2af-f60675855cd3/?utm_term=.5d424c6da9a0; see also W.L. Graf, *Fluvial Dynamics of Thorium-230 in the Church Rock Event, Puerco River, New Mexico*, 80 ANNALS OF THE ASSOC. OF AM. GEOGRAPHERS 327 (1990).

32. Graf, *supra* note 31, at 327.

33. *Id.*

34. Moore-Nall, *supra* note 5, at 17.

35. JOHANSEN & PRITZKER, *supra* note 3, at 184.

36. *Id.* at 185.

37. April Reese, *Navajo Group to Take Uranium Mine Challenge to Human Rights Commission*, N.Y. TIMES (May 12, 2011), <https://archive.nytimes.com/www.nytimes.com/gwire/2011/05/12/greenwire-navajo-group-to-take-uranium-mine-challenge-to-33718.html?pagewanted=1>.

38. *Id.*

39. *Id.*

included adequate environmental safeguards.”⁴⁰ According to the court, the NRC completed its due diligence before it issued the license.⁴¹ This decision meant that the Navajo Nation could no longer challenge the NRC’s decision to license the project. Despite this setback, the Navajo Nation has received some assistance from the Environmental Protection Agency (EPA) in addressing the impacts of uranium mining.

The EPA enforcement actions under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 have led to cleanups of contamination on the Navajo reservation.⁴² The extraction boom that took place in the 1970s on and near Navajo Nation reservation involved more traditional extraction practices that were regulated by neither the NRC nor the Department of Energy, including open-pit mining.⁴³ According to the EPA, regulatory authority under the Atomic Energy Act (AEA) only extended to uranium *milling* activities (like the ISR project at issue in the DBP case) and not to uranium *mining* activities like the ones that initially contaminated the Navajo lands. Consequently, the AEA did not “classify mine overburden or waste rock under the AEA as low-level radioactive waste or uranium byproduct material” and “its placement in specialized radioactive waste disposal facilities [was] not required.”⁴⁴ In other words, there were no rules requiring companies to dispose of open-pit mining waste in special waste facilities.

Decades after uranium extraction began on the reservation, the Uranium Mill Tailings Radiation Control Act of 1978 provided for the licensing of new facilities and clean up of older, previously unregulated sites.⁴⁵ Despite these efforts, the Navajo Nation never completely recovered from the initial contamination on the reservation and struggles to resist new sites licensed by the NRC near their lands.

2. *The Havasupai*

More recent uranium mining resistance efforts taking shape in the United States include efforts by the Havasupai to prevent uranium extraction operations from opening up near their sacred lands around the Grand Canyon. The Havasupai enjoy a twenty-year ban on mining near the Grand Canyon, first

40. *Id.*

41. *Id.*

42. The EPA has also initiated clean-up of abandoned Navajo Nation mines under the Superfund Program. Two hundred nineteen of 523 sites have been cleaned up. *See TENORM: Uranium Mining Residuals*, EPA (Aug. 22, 2018), <https://www.epa.gov/radiation/tenorm-uranium-mining-residuals>; *see also Cleaning Abandoned Uranium Mines*, EPA (May 3, 2018), <https://www.epa.gov/navajo-nation-uranium-cleanup/cleaning-abandoned-uranium-mines>.

43. *TENORM*, *supra* note 42.

44. *Id.*

45. Background on Uranium Mill Tailings, U.S. NUCLEAR REGULATORY COMM’N (Oct. 12, 2016), <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/mill-tailings.html>.

implemented in 2012 by the Secretary of the Interior.⁴⁶ Even so, industry groups sought to end the Department of the Interior's ban on mining near the Grand Canyon.⁴⁷ The Havasupai, nearby residents, and other environmental protection interest groups mobilized to resist this initiative and combat lawsuits challenging the ban.⁴⁸ Ultimately, the Ninth Circuit upheld "the decision of the Secretary of the Interior to withdraw, for twenty years, more than one million acres of public lands around Grand Canyon National Park from new mining claims" in *National Mining Association v. Zinke*.⁴⁹ In the Fall of 2018, the U.S. Supreme Court declined to hear the appeal challenging the Ninth Circuit opinion.⁵⁰ The Havasupai's collaboration with the federal government led to an important win not only for this tribe, but for all tribes in the region that benefited from the ban.

3. *The Oglala Sioux*

The Oglala Sioux also have a history of resisting extraction projects. The Oglala Sioux Tribe is a federally recognized tribe located near the Black Hills of South Dakota. According to the Oglala Sioux, the reservation borders "the Nebraska state line to the south, Rosebud Indian Reservation to the east[,] and Badlands National Park to the north."⁵¹ The counties comprising the Pine Ridge Reservation include some of the poorest in the nation.⁵²

Uranium mining began within the Great Sioux Nation's territory in the 1950s.⁵³ Uranium-bearing rock was first found in the Black Hills in 1977 after a geological survey.⁵⁴ Today, over one thousand open pit uranium mines remain in the four states comprising the Great Sioux Nation.⁵⁵ In addition to the uranium mines, the Great Sioux Nation must also contend with high arsenic exposure rates

46. Felicity Barringer, *U.S. to Block New Uranium Mines Near Grand Canyon*, N.Y. TIMES (Jan. 6, 2012), <https://www.nytimes.com/2012/01/07/science/earth/grand-canyon-area-uranium-mines-to-be-blocked-for-20-years.html>.

47. Joanna Walters, *Grand Canyon Uranium Mining Ban Upheld as Supreme Court Declines to Hear Challenge*, THE GUARDIAN (Oct. 1, 2018, 3:13 PM), <https://www.theguardian.com/environment/2018/oct/01/grand-canyon-uranium-mining-ban-upheld-as-supreme-court-declines-to-hear-challenge>.

48. *See id.*

49. Barringer, *supra* note 46.

50. Nat'l Mining Ass'n v. Zinke, 139 S.Ct. 57 (2018) (denying cert.).

51. OGLALA LAKOTA NATION, <https://www.oglalalakotanation.info> (last visited June 30, 2019).

52. "The US Census Bureau's 2014 study found that more than 52 percent of residents in Oglala Lakota, the largest of Pine Ridge's three counties, lived below the poverty line." The life expectancies for men and women are ages forty-eight and fifty-two, respectively. *See* Patrick Strickland, *Life on the Pine Ridge Native American reservation*, AL JAZEERA (Nov. 2, 2016), <https://www.aljazeera.com/indepth/features/2016/10/life-pine-ridge-native-american-reservation-161031113119935.html>.

53. Moore-Nall, *supra* note 5, at 19. The Oglala Sioux is one of several tribes that comprise the Great Sioux Nation. *See* Oglala Sioux Tribe, Comment Letter on Land-into-Trust Regulations (July 2, 2018) <https://www.bia.gov/sites/bia.gov/files/assets/as-ia/raca/pdf/70%20-%20Oglala%20Sioux%20Tribe.pdf>.

54. Bruce Johansen, *Uranium Rush in Black Hills*. S.D., 228 NATION 393 (Issue 14 1979).

55. Moore-Nall, *supra* note 5, at 19.

related to mines abandoned during the Gold Rush in the Black Hills.⁵⁶ The environmental impacts of these projects have pushed the Great Sioux Nation to challenge the siting of extraction facilities.

The Oglala Sioux are involved in several disputes with companies and federal agencies over the licensing of energy generation, transportation, and extraction projects. Collectively, these efforts have yielded mixed results. In addition to the DBP, the Oglala Sioux also contested an NRC license for an expansion of the Crow Butte ISR facility in Nebraska,⁵⁷ both of which have resulted in some success for the tribe.

In contrast to the Navajo Nation and Havasupai, the Oglala Sioux's reliance on NEPA appears to be a major source of its success. After I explain NEPA, I will discuss how the Oglala Sioux used it to protect their cultural resources throughout the NRC licensing proceedings. Thereafter, I will highlight how the NRC's characteristics influenced the effectiveness of this approach.

C. NEPA Overview

NEPA obligates federal agencies to incorporate analysis of environmental impacts into decision-making processes.⁵⁸ The stated purpose of the Act is to “insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.”⁵⁹ According to NEPA, all federal agencies must include in every recommendation for “major federal actions significantly affecting the quality of the human environment,” a detailed statement by the responsible official on “the environmental impact of the proposed action.”⁶⁰

Federal agencies issue regulations interpreting NEPA. The NRC's regulations interpret a “major Federal action” to include the “issuance of a license to possess and use source material for uranium milling or production of uranium hexafluoride.”⁶¹ In other words, according to the NRC regulations, environmental impact statements (EIS) must be completed before ISR licenses are issued.

NEPA also requires agencies to take a “hard look” at the effects of their proposed action.⁶² This “hard look” demands the preparation of an EIS *before*

56. Johnnye Lewis, Joseph Hoover & Debra MacKenzie, *Mining and Environmental Health Disparities in Native American Communities*, 4 CURRENT ENVIRONMENTAL HEALTH REPORTS 130–41 (2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5429369/>.

57. Talli Nauman, *Oglala Sioux Tribe Continues Fight Against Uranium Mining*, INDIANZ (Sept. 6, 2018), <https://www.indianz.com/News/2018/09/06/ogla-la-sioux-tribe-continues-fight-again.asp>.

58. See 42 U.S.C. § 4332 (2012).

59. 40 C.F.R. § 1500.1(b) (2018).

60. 42 U.S.C. § 4332(C) (2012).

61. 10 C.F.R. § 51.20(a), (b)(8) (2019).

62. See *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983).

the major federal action commences.⁶³ The EIS must include detailed statements addressing the project's impacts on the following:

(i) the environmental impact of the proposed action, (ii) any adverse effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁶⁴

According to federal regulations, the environmental effects that must be assessed include "ecological, [. . .] aesthetic, *historic, cultural*, economic, social or health" effects whether "direct, indirect, or cumulative."⁶⁵

This list of effects is consistent with the regulatory definition of the human environment which "shall be interpreted comprehensively to include the natural and physical environment and the *relationship of people with that environment*."⁶⁶ These regulations are the basis for interpreting NEPA to require analysis of a project's impact on cultural resources. Importantly, in the congressional declaration of environmental policy tied to NEPA, Congress states that the government has a responsibility to "preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice."⁶⁷ Using NEPA, the Oglala Sioux challenged NRC analyses of impacts on its cultural resources (religious sites, burial sites, sacred sites, etc.).

The Oglala Sioux also used the National Historic Preservation Act (NHPA) in order to protect its historic properties. The essence of the NHPA's purpose is to preserve historic properties in a spirit of stewardship for the benefit of future generations.⁶⁸ This purpose is supposed to be achieved through partnerships and collaboration between the federal government, States, local governments, Indian tribes, Native Hawaiian organizations, private organizations and individuals.⁶⁹ "Historic properties" include "artifacts, records, and material remains" that are related to and located within such properties.⁷⁰ Properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined "eligible for inclusion, on the National Register."⁷¹ NHPA requires tribal consultation when "Indian tribes and Native Hawaiian

63. *See id.*

64. 42 U.S.C. § 4332(C).

65. 40 C.F.R. § 1508.8(b) (2018) (emphasis added).

66. *Id.* § 1508.14 (emphasis added).

67. 42 U.S.C. § 4332(C).

68. 54 U.S.C. § 300101 (2012).

69. *Id.*

70. *Id.* § 300308.

71. *Id.*

organizations attach religious and cultural significance to historic properties off tribal lands.”⁷² This statute is often discussed in relation to NEPA.

NEPA and the NHPA are comparable in a couple of key ways. For example, the statutes both ask federal officials to “‘stop, look, and listen’ before making decisions that impact historic properties.”⁷³ Consequently, federal guidance on the implementation of NEPA and NHPA encourage the integration of the two information gathering processes.⁷⁴ However, NEPA and NHPA also differ in a few key ways. For example, the NHPA is limited to protection of “historical properties”—the scope of which is limited by the statute. NEPA on the other hand, broadly covers all cultural resources. Thus, the “cultural resource” concept has a broader scope than “historical properties.” As a result, NEPA also covers “sacred sites [and] archaeological sites” not eligible for NHPA coverage. Finally, it is well established that agency decisions implementing NEPA are reviewable by federal courts under the Administrative Procedure Act (APA).⁷⁵ However, Circuits are split on whether actions under the NHPA are reviewable because Congress did not create a private right of action for the statute.⁷⁶ Consequently, the tribe’s ability to enforce its rights under the NHPA may be limited to agency hearings in some jurisdictions or enforceable in court in others.

While the Oglala Sioux presented contentions to the NRC challenging the NRC Staff’s cultural resource review under NEPA and the NHPA, this Note focuses on the NEPA challenges. There are two reasons for this. First, the broader scope of NEPA may leave room for tribes to protect a greater array of resources than under the NHPA. Second, the Oglala Sioux’s NEPA contentions were more difficult for the NRC to resolve.⁷⁷

The Oglala Sioux challenged the adequacy of the agency’s ecological and cultural resource analyses under NEPA in the DBP and the CBP proceedings before the NRC. These proceedings are discussed in detail below.

72. 36 C.F.R. 800.2(C)(2)(ii) (2018).

73. See *NHPA: A Handbook for Integrating NEPA and Section 106*, C.E.Q. 4 (2013).

74. *Id.*

75. See *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 377 n.23 (1989) (stating that courts have allowed NEPA actions under the APA).

76. See *San Carlos Apache Tribe v. United States*, 417 F.3d 1091, 1093 (9th Cir. 2005) (holding that there is no private right of action under the NHPA after *Alexander v. Sandoval*, 532 U.S. 275 (2001)). *But see* *Boarhead Corp. v. Erickson*, 923 F.2d 1011, 1017 (3d Cir. 1991) (holding that the NHPA does not include a private right of action); *Vieux Carre Prop. Owners, Residents & Assocs., Inc. v. Brown*, 875 F.2d 453, 458 (5th Cir. 1989) (stating that the NHPA confers a private right of action only against federal agency defendants).

77. The NRC was eventually able to resolve the NHPA contentions in the DBP proceeding, but the NEPA challenges remained ripe. The ASLB concluded that the NRC Staff’s consultation efforts satisfied the NHPA consultation requirements in October of 2017. *Oglala*, 896 F.3d at 527.

II. THE DEWEY-BURDOCK PROJECT PROCEEDING

The DBP licensing proceeding commenced after Powertech⁷⁸ filed an application for an ISR project license for a new facility located in the Black Hills of South Dakota in 2009.⁷⁹ ISR is a uranium extraction process that involves injecting an oxidant-charged solution into an aquifer where the solution oxidizes and dissolves mineralized uranium.⁸⁰ This method produces a uranium-rich solution that is pumped back out of the ground through an extraction well then transferred to a processing facility via underground pipelines.⁸¹ The processing facility turns the mined material into yellow cake⁸² that is further enriched at another location.⁸³ To site such a facility, Powertech had to secure a license from the NRC.

AEA section 2011 authorizes the NRC to grant permits to “qualified applicants to transfer, deliver, or receive source material from in-situ leach uranium mining.”⁸⁴ The licensing process includes three stages at which the licensing application is evaluated.⁸⁵ First, there is a NRC Staff review where the initial application is approved or denied after an environmental impact assessment.⁸⁶ Second, the Atomic Safety and Licensing Board (the Board or ASLB) holds a licensing hearing where a panel hears contentions from intervenors and issues initial decisions on the contentions.⁸⁷ Third, the NRC conducts a review at which parties may seek to “adopt, modify, or set aside” the ASLB’s decision.⁸⁸

In 2007, the NRC started to prepare a Generic Environmental Impact Statement (GEIS) identifying areas amenable to ISR facility siting.⁸⁹ An NRC GEIS surveys areas for potential nuclear energy-related project uses. The NRC prepared the final GEIS (published in 2009)⁹⁰ in anticipation of numerous

78. Powertech (now merged with Azarga Uranium Corporation) was an Albuquerque, New Mexico-based corporation that engaged in uranium exploration and development. *See Oil, Gas, and Combustible Fuels: Company Overview of Powertech Uranium Corp.*, BLOOMBERG (accessed Feb. 14, 2019), <https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=24932174>.

79. 1 NRC NUREG-1910, Environmental Impact Statement for the DBP Project in Custer and Fall River Counties, South Dakota: Supplement to the Generic Environmental Impact Statement for In-Situ Leach Uranium Mining Facilities (Final Report), iii (Jan. 2014), <https://www.nrc.gov/docs/ML1402/ML14024A477.pdf>.

80. *Oglala Sioux v. Nuclear Regulatory Comm’n*, 896 F.3d 520, 542 (D.C. Cir. 2018).

81. *Id.* at 524, n.1.

82. Yellow cake is a “solid form of mixed uranium oxide, which is produced from uranium ore in the uranium recovery (milling) process.” *See Yellowcake*, U.S. NUCLEAR REGULATORY COMM’N (July 6, 2018), <https://www.nrc.gov/reading-rm/basic-ref/glossary/yellowcake.html>.

83. GEOFFREY H. FETTUS, MATTHEW G. MCKINZIE & NATURAL RESOURCES DEFENSE COUNCIL, *NUCLEAR FUEL’S DIRTY BEGINNINGS* 6 (2012).

84. *Oglala*, 896 F.3d at 523.

85. *Id.* at 523–24.

86. *Id.*

87. *Id.*

88. *Id.*

89. FETTUS & MCKINZIE, *supra* note 83, at 25.

90. *Id.*

applications for ISR facilities.⁹¹ This GEIS addressed the environmental impacts of siting ISR facilities in Wyoming, South Dakota, Nebraska, and New Mexico.⁹²

Shortly after the NRC published its GEIS, Powertech filed a license application for an ISR project.⁹³ The application was for the DBP. The DBP is located in South Dakota near the historic Black Hills, which have cultural significance to the Oglala Sioux. Powertech's ISR project application includes provisions for the construction, operation, and decommissioning of the ISR facility, as well as aquifer restoration.⁹⁴ Powertech also proposed that the liquid wastewater from the project be disposed of through "deep well disposal via injection in Class V wells,"⁹⁵ "land application," or "a combination of deep well disposal and land application."⁹⁶

After Powertech submitted its application, the NRC Staff completed a Supplemental Environmental Impact Statement (SEIS). Although the NRC already completed a GEIS for the region, the agency was required to complete a site-specific SEIS analyzing how this particular project would impact the area specified in Powertech's application.⁹⁷ Per the agency's regulations, NEPA also required the NRC Staff to "conduct a study or survey of tribal cultural resources before granting a license,"⁹⁸ consider the project's historic, cultural, and social effects,⁹⁹ and include "analysis of significant problems and objections raised by . . . any affected Indian Tribes" in its EIS.¹⁰⁰

NRC Staff began its analysis of the project's impacts on cultural and historical resources by identifying tribes that could be impacted.¹⁰¹ The NRC identified twenty-three tribes and asked them to participate in the tribal consultation required under NEPA and the NHPA.¹⁰² While the NRC awaited responses from the tribes, the agency asked Powertech for its NEPA and NHPA compliance strategy for the tribe's cultural resources and historic properties.

91. See *Generic Environmental Impact Statement for In Situ Leach Uranium Milling Facilities*, U.S. NUCLEAR REGULATORY COMM'N, <https://www.nrc.gov/materials/uranium-recovery/geis.html>.

92. 1 NRC NUREG-1910, *supra* note 79, at iii.

93. *Id.*

94. *Id.* at xxix.

95. "Class V wells are used to inject non-hazardous fluids underground. Most Class V wells are used to dispose of wastes into or above underground sources of drinking water." *Class V Wells for Injection of Non-Hazardous Fluids into or Above Underground Sources of Drinking Water*, EPA (Oct. 31, 2016), <https://www.epa.gov/uic/class-v-wells-injection-non-hazardous-fluids-or-above-underground-sources-drinking-water>.

96. 1 NRC NUREG-1910, *supra* note 79, at 4-245.

97. *Id.* at iii.

98. *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 532 (D.C. Cir. 2018); see also ASLB Initial Decision, 81 N.R.C. at 463.

99. 40 C.F.R. § 1508.8(b) (2018).

100. 10 C.F.R. § 51.71(b) (2019).

101. U.S. NRC, Final ENVIRONMENTAL IMPACT STATEMENT FOR THE DEWEY-BURDOCK PROJECT IN CUSTER AND FALL RIVER COUNTIES, SOUTH DAKOTA, 2 NRC NUREG-1910, at xlv (2014), available at <https://www.nrc.gov/docs/ML1402/ML14024A478.pdf>.

102. *Id.* at E-84.

According to email correspondences published with the Final EIS, Powertech hired a private consulting firm to develop the compliance plan.¹⁰³ Conspicuously absent from those communications was any mention of NEPA.¹⁰⁴

The consultation strategy set up by the NRC Staff (in collaboration with Powertech) failed to yield adequate participation from tribes. Of the twenty-three tribes initially contacted by the NRC Staff, only seven participated in the survey and of those seven, only four forwarded their data to the NRC Staff after receiving time extensions.¹⁰⁵ The Oglala Sioux was *not* one of the participating tribes.¹⁰⁶ The Oglala Sioux refused to participate in the survey because it believed that the NRC's methodology was inadequate and unscientific.¹⁰⁷

In a letter to the NRC, counsel for the Oglala Sioux summarized the tribe's criticisms of the NRC's methodology. The Oglala Sioux contended that an open site survey conducted solely by Tribal representatives would essentially place the onus on the Oglala Sioux to survey the site and catalogue cultural resources there.¹⁰⁸ This survey design called for a twenty-person group to review the project site.¹⁰⁹ The NRC Staff included a cultural advisor in each small group of six reviewers and proposed a new timeline in which reports would be submitted sixty days after the last day of field work identifying the sites.¹¹⁰ This survey design was estimated to cost \$818,493.40.¹¹¹ However, the Oglala Sioux believed the Makoche proposal previously submitted by the Lakota tribes should have been sufficient.¹¹²

Despite criticism, NRC Staff forged ahead and issued Powertech a license after the EIS was completed.¹¹³ The Oglala Sioux intervened during the second phase of the licensing process at the proceeding before the ASLB. The tribe

103. EIS FOR DEWEY-BURDOCK PROJECT, *supra* note 101, at A-43-44.

104. *Id.* at A-45-49.

105. *Id.* at F-5.

106. *Id.*

107. In the Matter of Powertech USA, Inc., ASLBP No. 10-898-02-MLA-BD01, (ASLB July 24, 2018) (order denying the Oglala Sioux's motion for summary disposition and its request to stay or revoke the license of Powertech).

108. See In Re Matter of Powertech, 2018 WL 3608265 (N.R.C.) at 2 (July 24, 2018) (citing In re Matter of Powertech, WL 9478623, 193 (Oct. 19, 2017)). The Oglala Sioux also outline their concerns about the survey methodology in a letter to the NRC on May 31, 2017. Letter from the Oglala Sioux to the NRC Regarding the Dewey Burdock Project (May 31, 2017), <https://www.nrc.gov/docs/ML1715/ML17152A109.pdf>.

109. MAKOCHE WOWAPI & MENTZ-WILSON CONSULTANTS, PROPOSAL WITH COST ESTIMATE FOR TRADITIONAL CULTURAL PROPERTIES SURVEY FOR PROPOSED DEWEY BURDOCK PROJECT (Sept. 27, 2012), available at <https://www.nrc.gov/docs/ML1522/ML15222B282.pdf>.

110. *Id.*

111. *Id.*

112. See *id.* In an *Oglala Sioux v. NRC* brief, Powertech contended that part of the proposed methodology would cost over four million dollars. I have not located the origin of that figure. However, the figure was cited in the brief as a quote of NRC Commissioner Svinicki discussing the methodology costs. Final Brief of Intervenor-Respondent, Powertech (USA), Inc. at 19, *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520 (D.C. Cir. 2018) (No. 17-1059).

113. *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 524-25 (D.C. Cir. 2018).

alleged that cultural, historical, and burial sites were within the project area.¹¹⁴ The Oglala Sioux hoped to protect cultural resources and groundwater from contamination.¹¹⁵ The Oglala Sioux contended that the NRC failed to comply with the requirements of NEPA because it did not adequately consider the project's impact on tribal lands of cultural and religious significance before it issued its decision.¹¹⁶ The tribe also petitioned the ASLB to stay the license.¹¹⁷ The ASLB denied the petition by claiming that "the Tribe's allegations 'lack[ed] the specificity needed to demonstrate a serious, immediate, and irreparable harm to cultural and historic resources.'"¹¹⁸ The ASLB denied the stay without discussing the merits of the Oglala Sioux's contentions.¹¹⁹

After a hearing on the merits, the Board's ruling on a few of the Oglala Sioux's contentions actually favored the tribe.¹²⁰ The two contentions include Contention 1A, which claimed that "the EIS did not satisfy NEPA because it failed to adequately address the environmental effects of the DBP project on Native American cultural, religious, and historical resources."¹²¹ The Board also ruled favorably on Contention 1B, which alleged that "the NRC Staff had failed to fulfill its responsibilities regarding consultation with Native American tribes under the National Historic Preservation Act (NHPA)."¹²² The Board concluded that NEPA's hard look requirement was not satisfied because the EIS did not include adequate analysis of cultural sites for the Oglala Sioux or the majority of the other consulting tribes.¹²³

Importantly, the ASLB wrote the following in its opinion:

[The] Tribe's challenge to (1) the scientific integrity and lack of a trained surveyor or ethnographer coordinating the survey; (2) the number of tribal members invited to participate in the survey; (3) the length of time provided for the survey; and (4) the tribes invited to participate in the survey—establish a significant material factual dispute as to the reasonableness of the

114. *Id.* at 524.

115. *Id.*

116. *See* In the Matter of Powertech USA, Inc., ASLBP No. 10-898-02-MLA-BD01, (ASLB Oct 30, 2018) (Order denying Oglala Sioux's motion for summary disposition and its request to stay or revoke the license of Powertech for failure to show an issue of material fact as to the reasonableness of the NRC Staff's survey methodology).

117. *Oglala*, 896 F.3d at 525.

118. *Id.*

119. *Id.*

120. The tribe presented eight contentions to the Board at the hearing. *Id.* Most of the contentions concerned the more scientific aspects of the project, including questions about "the sufficiency of baseline ground water quality information," analysis of proposed mitigation measures, and the adequacy of a plan for disposing of byproduct material. *Id.*

121. *Id.*

122. The ASLB eventually concluded that the NRC Staff's consultation efforts satisfied the NHPA consultation requirements in October 2017. The ASLB granted the NRC Staff's motion for summary disposition on that issue. *Id.* at 527. The Board denied the motion on the NEPA violation. Resolution of the outstanding NEPA violations was scheduled for October 2018, but it has since been suspended without a new end date. *Id.*

123. *Id.* at 525.

NRC Staff's proposed terms for an open-site survey to assess the identified deficiencies in this [Final SEIS].¹²⁴

The Board also stated that the NRC Staff's consultation process with the Oglala Sioux was inadequate to satisfy the NHPA.¹²⁵ However, despite these findings, the Board chose not to suspend Powertech's license.¹²⁶ This prompted the Oglala Sioux to appeal the Board's decision.

After the Board issued the decision, the proceeding moved on to NRC review. At the NRC, parties may seek review of Board decisions. The NRC is empowered to "adopt, modify, or set aside" the Board decisions.¹²⁷ However, upon review, the NRC left the license in effect because the Oglala Sioux failed to "articulate any harm or prejudice from the NRC Staff's failure [to comply with NEPA]."¹²⁸ The NRC's final order left the proceedings open until the NRC Staff cured the NEPA and NHPA violations.¹²⁹

On February 21, 2017, the Oglala Sioux petitioned the D.C. Circuit, seeking review of the NRC's decision to leave Powertech's license in effect despite its determination that there was significant NEPA compliance deficiency.¹³⁰ The cultural resource analysis negotiations continued after the petition was filed. On July 2, 2018, the NRC Staff told the Oglala Sioux that the NRC would discontinue its efforts to conduct the cultural resource survey "because of fundamental incompatibilities in the approaches proposed by each side."¹³¹ On July 19, 2018, the ASLB set deadlines to submit arguments to resolve the matter without a new survey.¹³²

On July 20, 2018, the D.C. Circuit issued its opinion, just over two weeks after the NRC announced it would not conduct a new survey. To determine whether the agency's action was lawful, the court reviewed the NRC's order under the APA.¹³³ The court accepted the ASLB's finding that the NRC violated NEPA when it failed to conduct the required survey of tribal cultural resources before it granted Powertech the license.¹³⁴ Ultimately, the court reasoned that the NRC's practice of granting licenses now, and curing deficiencies later, frustrates the purpose of NEPA.¹³⁵ NEPA requires an EIS *before* major

124. In the Matter of Powertech USA, Inc., ASLBP No. 10-898-02-MLA-BD01 (ASLB Oct 30, 2018), at 6.

125. *Id.*

126. *Oglala*, 896 F.3d at 525.

127. *Id.* at 524.

128. *Id.* at 526 (internal quotations omitted).

129. *Id.*

130. *Id.* at 522–23.

131. Seth Tupper, *Court, regulators clash over uranium project in South Dakota*, AP NEWS (Aug. 13, 2018), <https://apnews.com/a2301044d6e94f54802bd5373e3fa6a6>.

132. *Id.*

133. 5 U.S.C. § 706(2)(A) (2012).

134. *Oglala*, 896 F.3d at 531 (referencing the ASLB's Initial Decision, 81 N.R.C. at 653).

135. *Id.*

actions.¹³⁶ The law is intended to ensure that information is provided to citizens and policymakers before decisions are made and actions taken.¹³⁷

The court also expressed concerns about the NRC's practice of requiring proof of harm before granting a license stay. The Oglala Sioux moved to stay the license before the ASLB heard its contentions.¹³⁸ Because a stay would have been granted automatically upon a showing of harm, the court concluded that the NRC effectively made a showing of harm a precondition to the enforcement of NEPA.¹³⁹ The court also pointed out that the tribe would not be able to prove the harm required to secure a stay if the EIS was incomplete.¹⁴⁰

Despite its holding that the NRC violated NEPA, the court did not revoke or suspend the issued license. First, the court reasoned that on balance, the seriousness of the NEPA violations did not outweigh the repercussions for the applicant that now relied on the license.¹⁴¹ The court found that the Oglala Sioux would not suffer harm if the license were left intact because South Dakota's construction requirements would prevent the project from moving forward until NEPA compliance was reached.¹⁴² The court also considered claims that Powertech's stock price would plummet if its license was revoked.¹⁴³ Lastly, the Court found no reason to believe that the NRC would not eventually comply with NEPA.¹⁴⁴

Ultimately, the D.C. Circuit held that "once the NRC determines that 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."¹⁴⁵ The case was remanded to the NRC for further proceedings to cure the NEPA violation.¹⁴⁶ While the Oglala Sioux failed to secure a license revocation from the court, it did force the agency to go back and bring the project into NEPA compliance.

Overall, the DBP proceedings demonstrate how the Oglala Sioux were able to mobilize their claim that the NRC failed to comply with NEPA's cultural resource analysis requirement to slow this project. However, the DBP was not the only project the Oglala Sioux was able to slow down using NEPA. The Oglala Sioux also intervened in proceedings for the CBP, alleging defects in the NRC's cultural resource analyses, and experienced similar success.

136. *Id.* at 523.

137. *See* 40 C.F.R. § 1500.1(b) (2018).

138. *Oglala*, 896 F.3d at 525.

139. *Id.* at 531. The court describes this predicament as a classic "Catch-22." This language is cited in new federal court cases challenging federal agency actions. The agencies challenged in the cases include the Federal Communications Commission and Department of Energy. *Id.* at 533.

140. *Id.*

141. *Id.*

142. *Id.*

143. *Id.* at 534.

144. *Id.*

145. *Id.* at 538.

146. *Id.* at 539.

III. CROW BUTTE PROJECT PROCEEDING

In addition to the DBP, the Oglala Sioux are resisting a project in Crow Butte, Nebraska, arguing that the NRC failed to adequately consider the project's impacts on the tribe's cultural and ecological resources. The Canadian license applicant, Cameco Resources,¹⁴⁷ already operated a commercial in-situ uranium mining facility at the proposed site since 1991.¹⁴⁸ In 2007, Cameco filed applications to the NRC to relicense and expand existing mining facilities.¹⁴⁹ Like in its DBP resistance efforts, the Oglala Sioux intervened during the CBP's NRC licensing proceeding by submitting a series of cultural and ecological resource contentions to the ASLB, which emphasized NRC Staff failures to comply with NEPA and the NHPA.¹⁵⁰

In an unexpected decision, the ASLB agreed with the Oglala Sioux. The Board concluded that the NRC Staff failed to comply with NEPA and the NHPA's requirements because it failed to identify cultural properties and consult with the Oglala Sioux.¹⁵¹ However, like in the DBP decision, the Board chose not to revoke the applicant's license because of NEPA compliance failures. The ruling was split. There were "two [votes] in favor of the NRC and two in favor of the intervenors."¹⁵² The Board instructed the NRC Staff to supplement the assessment with "additional analysis of possible traditional cultural properties around the mine."¹⁵³

The ultimate outcome of this resistance effort is currently pending before the NRC. There have been a few developments in the case. First, the NRC scheduled a hearing for public comment on the matter, which will occur only if enough individuals submitted comments two weeks before the scheduled hearing date.¹⁵⁴ Second, Cameco decided to cease uranium mining activities in the

147. "Cameco Resources" or "Crow Butte Resources" is part of the largest uranium mining company in the world, Cameco, Inc. See Southwest Research and Information Center, *Opposition to Uranium Development in Northwestern Nebraska*, 9 Voices from the Earth 10 (2008), http://www.sric.org/voices/2008/v9n3/Voices_Fall08_Uranium_Nebraska.pdf [hereinafter SIRC].

148. See *Crow Butte*, CAMECO CORPORATION (2018) <https://www.camecoresources.com/business/crow-butte>.

149. SIRC, *supra* note 147, at 10.

150. *Id.*

151. John Axtell, *Partial Decision on Crow Butte Challenges*, KNEB (May 27, 2016), <http://kneb.com/regional-news/partial-decision-on-crow-butte-challenges/>.

152. Kerri Rempp, *Crow Butte license partial ruling issued*, RAPID CITY JOURNAL (May 31, 2016), https://rapidcityjournal.com/community/chadron/crow-butte-license-partial-ruling-issued/article_54d292b2-2761-11e6-90b3-23c3761d98d8.html.

153. Kerri Rempp, *Federal board rules on Crow Butte disputes*, RAPID CITY JOURNAL (Dec. 27, 2016), https://rapidcityjournal.com/community/chadron/federal-board-rules-on-crow-butte-disputes/article_de9ae9f4-cc61-11e6-a546-c36c972b9b4d.html.

154. Talli Nauman, *Feds could scrap public hearing on Crow Butte uranium*, NATIVE SUN NEWS (Sept. 7, 2018), <https://www.nativesunnews.today/articles/feds-could-scrap-public-hearing-on-crow-butte-uranium/>.

United States because of market concerns.¹⁵⁵ Irrespective of any formal determinations made concerning this project after any and all appeals are exhausted, the fact remains that the Oglala Sioux tribe was able to slow down this project with its cultural resource contention before the ASLB.

In both the DBP and CBP project proceedings, the Oglala Sioux contended that the NRC failed to comply with NEPA's requirement that it consider project impacts on the tribe's cultural resources. In both cases, the Oglala Sioux persuaded the ASLB that the NRC failed to comply with NEPA because its review of this issue was inadequate. However, despite these successes, the Oglala Sioux was not as successful in slowing these projects with its ecological challenges under NEPA. I develop an explanation for this phenomenon below and further articulate some limitations on the Oglala Sioux's ability to use cultural resource challenges to slow NRC licensed projects.

IV. THE NRC'S IMPACT ON TRIBAL SUCCESS WITH ECOLOGICAL AND CULTURAL RESOURCE NEPA CHALLENGES

A. *The NRC's Characteristics Frustrate Tribal Challenges to Its Ecological Resource Conclusions*

While the Oglala Sioux were successful in challenging some NRC cultural resource conclusions using NEPA, tribal success with challenges to the adequacy of the NRC's ecological conclusions (for example, as related to water quality) may be limited because of the NRC's norms, structure, and rules. The DBP and CBP disputes exemplify this phenomenon.

In the DBP proceeding, the Oglala Sioux submitted several contentions addressing the inadequacy of the EIS, many of which discussed ecological issues like inadequate groundwater quality analyses.¹⁵⁶ The ASLB ruled against the Oglala Sioux on all of the ecological contentions, but initially found NEPA and NHPA cultural resource analysis violations.¹⁵⁷ This result nearly recurred in the CBP licensing dispute, except that time, a state environmental quality agency indicated that there was a problem with the applicant's plans to protect aquifers.¹⁵⁸ The ASLB was persuaded by the state agency's analysis and found for the Oglala Sioux on one of its many ecological contentions.¹⁵⁹ Why is it so

155. The company posted information on the status of its U.S. projects on its website. It states, "[i]n light of the continued depressed market conditions, on April 21, 2016, Cameco Resources announced it is deferring new wellfield development at US operations." See *Business* (2018), <https://www.camecoresources.com/business>. This announcement means that the company deferred construction on the CBP indefinitely. See *id.*

156. *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 524 (D.C. Cir. 2018).

157. The NHPA violation was remedied by the NRC before the D.C. Circuit opinion was issued. *Id.* at 527 n.4.

158. SRIC, *supra* note 147, at 10.

159. *Id.*

difficult to challenge the ecological aspects of the NRC's conclusions under NEPA? The answer lies in the NRC's structure, norms, and rules.

In this Note, "structure" refers to the organizational aspects of the NRC, including the configuration of the organization, the characteristics of its staff, and the funding mechanism. "Norms" refer to the everyday practices of NRC employees and decisionmakers. "Rules" refer to official guidance directing agency action including federal statutes and regulations, federal and NRC case law, agency protocol manuals, and policy statements.

1. Structure

The NRC's organizational structure favors information produced by the agency's employees. Many employees at the NRC have advanced degrees, including degrees in health physics.¹⁶⁰ Therefore, NRC Staff may be less likely to entertain scientific conclusions from outside sources. In a battle of the experts, it may be difficult to prove that the agency's science is faulty, even if intervenors provide qualified expert testimony. This was the case in the DBP licensing battle. The Oglala Sioux proffered experts that expressed substantial concerns about impacts on water quality,¹⁶¹ but that issue and other ecological concerns raised by the Oglala Sioux were rejected by the ASLB.¹⁶²

2. Norms

The NRC also takes the initiative to conduct some scientific studies in anticipation of industry needs. The NRC Staff created a GEIS reviewing whole regions of the country for ISR project siting before applications were submitted. There was no statutory mandate for this. The 2009 GEIS conducted was the document that identified the Oglala Sioux's traditional territories for potential ISR projects. The agency decided that the area was safe for ISR before Powertech applied for the license. It seems unlikely that the NRC would change its position, even if intervenors provided credible evidence from outside experts.

However, the CBP does complicate this analysis. In that proceeding, the ASLB relied heavily on information provided by the Nebraska Department of Environmental Quality (NDEQ) when it ruled in favor of the Oglala Sioux on an ecological contention involving aquifers.¹⁶³ In-situ leach uranium processing

160. Agency regulations require positions for employees trained in health physics. *See* 10 C.F.R. pt. 20 (Standards for Protection Against Radiation NUREG-1736).

161. *See* Brief for the Petitioner at 25, *Oglala Sioux v. U.S. Nuclear Regulatory Comm'n*, 896 F.3d 520 (D.C. Cir. 2017) (No. 17-1059), 2017 WL 4457531, at *25.

162. According to the Court, "the Board ruled against the Tribe on: Contention 2, regarding the sufficiency of baseline groundwater quality information; Contention 3, concerning the EIS's analysis of features that could permit groundwater migration; and Contention 6, relating to the EIS's analysis of proposed mitigation measures." *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 525 n.3 (D.C. Cir. 2018) (citing ASLB Initial Decision, 81 N.R.C. at 708-09 (J.A. 507-08)).

163. SRIC, *supra* note 147, at 10.

requires the injection of fluids into aquifers, potentially compromising water quality.¹⁶⁴ Cameco needed an “aquifer exemption” from the EPA or the State of Nebraska to secure its license.¹⁶⁵ In 2007, the NDEQ rejected Cameco’s Aquifer Exemption Petition because it “lack[ed] site specific data, inclusion of recent research, and the presentation of well supported scientific interpretations to be considered acceptable.”¹⁶⁶

However, the NRC Staff sought to exclude the NDEQ report from the record when intervenors presented their contentions before the ASLB.¹⁶⁷ Despite this effort, the ASLB found the report persuasive and referenced it anyway.¹⁶⁸ The NRC Staff’s (1) conclusion that the aquifer issue was resolved and (2) subsequent advocacy for the exclusion of conflicting evidence produced by a credible state environmental agency raise concerns about the Staff’s objectives.

There are a couple potential explanations for this apparent conflict between the NRC Staff and ASLB decisions. First, it is possible that the NRC Staff has a stronger proindustry bias than the ASLB, which has stuck down and challenged Staff decisions.¹⁶⁹ Second, it is also possible that the ASLB prefers information from government agencies it deems credible and defers to the Staff’s science unless there is governmental evidence to the contrary. Although this ecological challenge was successful in the CBP, other tribes will have difficulties replicating these results because the Oglala Sioux was supported in this case by a state environmental protection agency.

3. Rules

One way to challenge the agency’s decision making and conclusions on ecological resource issues is to argue in federal court that the agency acted arbitrarily or capriciously when it made its decision.¹⁷⁰ However, it seems likely that any petitioner would have an uphill battle proving that the agency acted arbitrarily when it has its own highly qualified experts supporting its decisions. To overcome the agency expert’s conclusions on appeal, it is not sufficient to

164. *Id.*

165. *Id.*

166. *Id.* The South Dakota Department of Environment and Natural Resources initially rejected Powertech’s aquifer exemption application. FETTUS & MCKINZIE, *supra* note 83, at 35. However, in 2011, the state legislature stripped the state agency of its authority to regulate aquifer exemptions. *Id.* Authority reverted back to the EPA, which found in favor of Powertech in 2013. See Underground Injection Control, *Public Notice: EPA Dewey-Burdock Class III and Class V Injection Well Draft Area Permits*, EPA (Aug. 2, 2017), <https://www.epa.gov/uic/epa-dewey-burdock-class-iii-and-class-v-injection-well-draft-area-permits>.

167. SRIC, *supra* note 147, at 10.

168. *Id.*

169. The ASLB rejected NRC Staff arguments when it found NEPA violations in both the DBP and CBP hearings before the ASLB. In the Matter of Powertech USA, Inc., ASLBP No. 10-898-02-MLA-BD01 (ASLB Oct 30, 2018), at 6. See also SRIC, *supra* note 147, at 10. It also rejected arguments from staff to exclude the NDEQ’s findings on the aquifer issue. *Id.*

170. See 5 U.S.C. § 706(2)(A) (2012).

offer contradictory expert testimony. Unless the agency's choice to accept the NRC's science fails to withstand APA scrutiny, the agency's decisions will be difficult to challenge.¹⁷¹

B. The NRC's Characteristics Facilitate Cultural Resource Challenges Under NEPA . . . But There Are Limits

Ultimately, the D.C. Circuit remanded *Oglala Sioux v. Nuclear Regulatory Commission* to the NRC because the agency failed to properly comply with the requirements of NEPA.¹⁷² Because the agency eventually resolved the NHPA violation before the conclusion of the suit, the NEPA violation was the only outstanding contention remaining when the D.C. Circuit issued its opinion. The NEPA cultural resource violation also withstood ASLB review during the CBP.¹⁷³ Given, the outcomes in the *Oglala Sioux* proceedings, this Note explains why the *Oglala Sioux* was more successful with the cultural resource challenges despite the NRC's ability to influence the outcomes of the proceedings, previously discussed in the ecological resource context. However, despite the *Oglala Sioux*'s success, the cultural resources NEPA challenge does not amount to a limitless license to unilaterally halt NRC extraction projects at will. Building on the information provided in the previous sections, this Part unpacks the possibilities and limits of the use of NEPA cultural resource analyses by tribes; it is the essence of this Note.

1. Structure

It is likely that the educational backgrounds of NRC Staff made it easier for the *Oglala Sioux* to challenge the agency employees' expertise regarding cultural resources. The directors managing the cultural survey had advanced degrees in health physics but no relevant social science education.¹⁷⁴ Despite their impressive academic credentials, these employees seem unqualified to lead a cultural resource identification project involving tribal members. Indeed, in one of their reply briefs, counsel for the *Oglala Sioux* noted that "[the] NRC has acknowledged in testimony that neither the company nor the NRC staff possessed or obtained the necessary expertise to identify the impacted cultural resources."¹⁷⁵ Without either a social science background or specific knowledge of the *Oglala Sioux* sites, the Staff were ill-equipped to identify sites and ensure NEPA compliance.

171. *See id.*

172. *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 525 (D.C. Cir. 2018).

173. *See Axtell, supra* note 151; *see also* ASLB, *Partial Initial Decision Docket No. 40-8943* 84–87 (2016), <https://www.nrc.gov/docs/ML1614/ML16147A587.pdf>.

174. EIS FOR DEWEY-BURDOCK PROJECT, *supra* note 101, at A-43–44.

175. Brief for the Petitioner at 10, *Oglala Sioux v. U.S. Nuclear Regulatory Comm'n*, 896 F.3d 520 (D.C. Cir. 2017) (No. 17-1059), 2017 WL 4457531, at *10.

Furthermore, because NEPA calls for scientific information,¹⁷⁶ the NRC Staff's lack of social science expertise makes it more probable that NEPA compliance challenges will be brought against deficient cultural resource analyses. The Oglala Sioux raised an excellent point when it claimed that NRC's process was not reasonable because it was "informal" and exhibited "a fundamental lack of accepted methodology."¹⁷⁷ The Oglala Sioux further emphasized a desire for a "competent and complete" survey of the cultural resources at the project site.¹⁷⁸ This persuasive argument underscores the issues plaguing the NRC Staff's lack of career social science experts. In fact, given that NEPA asks that an "interdisciplinary approach" be used to "insure the integrated use of the natural and social sciences"¹⁷⁹ it seems possible that in the future Native American tribes could argue that NEPA actually requires the NRC to use social science research in the cultural resources context.

Tribes may take advantage of the NRC's lack of expertise, but in doing so, they must be careful not to create new challenges for themselves. If tribes attempt to force the NRC to adopt a more scientific process, then undesirable results may emerge in the long run. For example, tribal expertise may be of limited importance if social science expertise starts to take precedence. One could imagine a scenario in which various researchers from academic institutions are called upon to participate in the NRC's cultural resource studies. Over time, these social scientists may become more authoritative than the tribal members. Surely tribes will want the NRC to improve its survey methodology if it means more cultural resources will be protected. However, tribes will need to retain the ability to utilize their expertise when necessary to protect resources that NRC-selected methodologies fail to cover. Finally, there is nothing stopping the NRC from hiring cultural resource experts from universities or recruiting experts from the tribes. It may not take much effort for the NRC to become competent.

Further, if the current policies were amended to favor tribal preferences for survey methodologies and consultation practices, it is possible that the NRC Staff would engage in obstructive behaviors and frustrate the purpose of the changes. The NRC Staff's implementation of the NRC's new Tribal Protocol Manual exemplifies this.¹⁸⁰ Although the manual expresses an objective to ensure that the NRC Staff are interacting with tribal members in a way that is both respectful and cognizant of tribal sovereignty,¹⁸¹ recent actions by the NRC Staff contradict that objective. For example, just before the D.C. Circuit released its opinion in

176. See 42 U.S.C. § 4332(2)(A) (2012) (stating that "all agencies of the Federal Government shall . . . utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences . . . in planning and in decision making which may have an impact on man's environment.").

177. Letter from Oglala Sioux to NRC, *supra* note 108.

178. *Id.*

179. See 42 U.S.C. § 4332(2)(A).

180. See U.S. NUCLEAR REGULATORY COMM'N, TRIBAL PROTOCOL MANUAL (2017).

181. See *id.* at 14.

the Powertech case, the ASLB decided to abandon the proper cultural resource analysis, ignoring years of concerns expressed by the tribes.¹⁸² Further, in the fall of 2018, the NRC Staff claimed it would cancel an important hearing and opportunity for public comment if it concluded that too few requests for comment were submitted in the two weeks leading up to the hearing.¹⁸³ This shocked and surprised community members.¹⁸⁴

Finally, the agency's source of funding might also negatively impact a tribe's ability to affect NRC decision making through NEPA cultural resource challenges. Most of the NRC's funding comes from project application fees.¹⁸⁵ When the NRC is too harsh on license applicants, its operating budget is reduced: no licenses, no revenue. In short, the NRC has a financial interest in the success of the regulated community that may create a proindustry bias.

2. Norms

The NRC allowed the license applicant to influence the survey methodology selection process significantly. In written communications between Powertech and the NRC Staff published as part of the Final EIS, the survey director asked Powertech to (1) develop a survey methodology that would comply with NEPA and NHPA and (2) submit a compliance plan to the NRC by a specified date.¹⁸⁶ In the letter, the NRC director provided Powertech with a couple of examples of ways that other companies complied with NEPA and NHPA, but ultimately left the selection of the particular method utilized to the company as it submitted its proposal.¹⁸⁷ The communications indicate that the NRC may not have been as intimately involved in the selection of survey methodologies as it suggested to the D.C. Circuit. The agency did not pick the survey methodology in the DBP dispute because it was the best choice; rather, it appears that Powertech selected the method initially. It is difficult to square agency representations that it has a purposeful survey methodology process with an actual process that seems more like a rubber-stamp approval of applicant preferences. The NRC's negotiations with the Oglala Sioux did not begin until after it already approved the license and backed Powertech's methodology.

182. Tupper, *supra* note 131.

183. *Id.*

184. *Id.*

185. According to the NRC, “[a] large percentage of the NRC’s authorized budget is defrayed by the collection of license fees as required by law.” See *Our Plans, Budget, & Performance*, U.S. NUCLEAR REGULATORY COMM’N (Jan. 25, 2019), <https://www.nrc.gov/about-nrc/plans-performance.html>; “OBRA-90 requires that NRC recover approximately 90 percent of its annual budget authority through fees assessed to licensees, excluding amounts appropriated for specific purposes.” See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-17-232, NUCLEAR REGULATORY COMM’N: REGULATORY FEE SETTING CALCULATIONS NEED GREATER TRANSPARENCY, 7 (2017), available at <https://www.gao.gov/assets/690/682455.pdf>.

186. EIS FOR DEWEY-BURDOCK PROJECT, *supra* note 101, at A-43-44.

187. *Id.*

It is also worth noting that Powertech hired a consulting firm to develop its compliance plan; however, that plan only included information on NHPA compliance.¹⁸⁸ The plan did not mention NEPA compliance at all.¹⁸⁹ NRC Staff still accepted the plan, even though the agency requested a plan for both NEPA and NHPA compliance.¹⁹⁰ Setting aside this oversight, as a general matter, it is difficult to see how courts should view the NRC's survey methodology choices as decisions utilizing agency expertise and demanding deference when the agency may not select the plan in the first place. It seems unfair for courts and the NRC to favor industry preferences over the preferences of the people most impacted by the decisions.

Despite the NRC's seemingly hands-off approach to survey methodology selection, which invites opportunities for tribes to bring NEPA challenges, the NRC's susceptibility to agency capture may still limit a tribe's ability to use the NEPA cultural resource challenge to stall projects. First, it is well known that NRC employees tend to secure industry jobs after working for the agency.¹⁹¹ In fact, one of the directors managing tribal consultations for the Powertech proceeding left his position to work for a private consulting firm before the proceedings concluded.¹⁹² While this problem afflicts many federal agencies, the specialized knowledge involved in nuclear regulation may exacerbate this phenomenon. The practical implication is this: it will be difficult to encourage NRC Staff to side with tribes if NRC employees desire to work for the regulated community.

Second, it seems commonplace for the NRC to not reject licenses even if the license applications do not comply with federal statutes like NEPA. This issue is prevalent in the reactor licensing and mining licensing contexts.¹⁹³ The NRC licensed the DBP and CBP despite the NEPA violations. It seems like the NRC shrugs off compliance deficiencies and views them as matters for the applicants to cure at a later time. Fortunately for the tribes, it looks like the federal courts are willing to intervene if the NRC fails to comply with NEPA's requirements.

188. *Id.*

189. *Id.*

190. *See id.*

191. Zeller, *supra* note 24.

192. A list of Larry W. Camper's communications in the Powertech licensing consultation proceeding is included in the communications published with the Final SEIS. *See* EIS FOR DEWEY-BURDOCK PROJECT, *supra* note 101, at A-1-4. Larry W. Camper's biography on a private consulting firm website confirms his hiring by the private consulting firm. *See* Larry W. Camper, TALISMAN INTERNATIONAL, <https://talisman-intl-enercon.com/home/personnel/all-consultants/larry-w-camper/> (last visited Feb. 12, 2019).

193. Refer to discussion of the NRC's reluctance to deny licenses to applicants in Part I.

3. Rules

The unique structure of the NRC's licensing process also offers tribes a special opportunity to intervene and set forth their NEPA concerns. The AEA allows parties to intervene in NRC licensing application proceedings during ASLB review.¹⁹⁴ The tribes do not have to wait until the administrative process runs its full course to challenge decisions made early in the process by NRC Staff. An earlier opportunity to intervene gives tribes earlier opportunities to slow the licensing proceedings.¹⁹⁵ Although the ASLB continues to grant licenses to noncompliant applicants, tribes should continue to use this forum to advocate because at least some current ASLB members have demonstrated a willingness to reject unsupported NRC Staff contentions and findings.

Second, there is favorable NRC guidance available to tribes as they attempt to influence the NRC's cultural resource studies. The NRC recently issued new guidance on tribal consultation and interactions for its staff.¹⁹⁶ The guidance foregrounds tribal needs and emphasizes that dealings with tribes are government-to-government relations.¹⁹⁷ Highlights include promises to consult with tribes in "good faith" and to maintain "cooperation with the tribes."¹⁹⁸ The document also includes a number of specific instructions regarding etiquette. The directives include "exhibiting flexibility," being respectful, and focusing on tribal concerns.¹⁹⁹ While most of the guidance is in the form of recommendations, it is clear that this manual attempts to change the culture at the NRC and transform NRC Staff interactions with tribes. With this agency guidance in hand, tribes may have some enhanced political power. Tribes may leverage the NRC's attempt to be more respectful towards them to secure more favorable cultural resource survey methodologies.

The guidance has one critical shortfall: it does not discuss NEPA compliance at length. Instead, the manual includes a lengthy discussion of the NHPA. The NRC may be struggling with NEPA compliance because it has not released adequate protocol. In this way, the lack of protocol could leave room for tribes to take control of the process and mold it for their benefit.

Despite the numerous policies that make it possible for tribes to protect cultural resources with NEPA, one substantial complication may limit the

194. *Oglala Sioux v. Nuclear Regulatory Comm'n*, 896 F.3d 520, 523–24 (D.C. Cir. 2018).

195. The NRDC and other critics view this aspect of the NRC's process as obstructing the work of opponents of NRC-licensed projects. *See FETTUS & MCKINZIE, supra* note 83, at 24. The critics point out that the NRC's process is complex, confusing, and requires parties to articulate issues with the environmental analyses before the agency completes its analysis. *See id.* Inexperienced parties have difficulty participating in this complex process in a timely fashion. *See id.*

196. The NRC's Tribal Protocol Manual was recently published in the Federal Register on August 24, 2018 as NUREG-2173. *See NRC Tribal Protocol Manual*, 83 Fed. Reg. 42,945 (Aug. 24, 2018), available at <https://www.govinfo.gov/content/pkg/FR-2018-08-24/pdf/2018-18277.pdf>.

197. TRIBAL PROTOCOL MANUAL, *supra* note 180, at 10.

198. *Id.* at 15.

199. *Id.* at 24, 26.

effectiveness of this approach—case law.²⁰⁰ The case law states that the agency need only make “reasonable efforts” to collect information missing from an EIS. According to *Natural Resources Defense Council v. Morton*, NEPA’s hard-look requirement is subject to a “rule of reason.”²⁰¹ Agencies are not required to consider risks that are “remote and speculative” or events that have a very low probability of occurring.²⁰² These rules are problematic for tribes because they set upper limits on the amount of work the agency has to undertake to complete a cultural resource analysis. Furthermore, these rules give the NRC power to determine when it is reasonable to end its cultural resource studies.

A decision by the NRC further explains the agency’s power over decision making. The *Pilgrim* case explains favorable rules the agency has in its court. In that case, the NRC stated that in assessing foreseeable impacts, there “will always be more data that could be gathered,” so agencies “must have some discretion to draw the line and move forward with decision-making.”²⁰³ In assessing these impacts, the agency is not required to use “the best scientific methodology”;²⁰⁴ agencies are free to “select their own methodology as long as that methodology is reasonable.”²⁰⁵ In short, agencies are not required to subject themselves to endless inquiries into information for the EIS.²⁰⁶ Their inquiry need only be reasonable, and the agency has discretion to draw the line where it deems appropriate. These rules give the NRC the power to determine when enough is enough.

The NRC case law indicates that it is ultimately up to the agency to decide when it has conducted a reasonable inquiry into environmental impacts for EISs. This poses a significant obstacle for tribes. The NRC may argue that efforts that are minimal (from the tribes’ perspective) are reasonable. The best way to combat the agency’s discretion here is for tribes to develop creative ways to challenge the reasonableness of the methods employed by the agency. For example, in the CBP proceeding, the tribe could argue that the minimal survey methodology employed could never yield sufficient information about the tribal sites. It is unclear what reasonable efforts to collect information about cultural resources will look like over time.

200. Circuit case law cited by the NRC in its final orders becomes citable agency authority. For example, a case from the Second Circuit cited by the NRC in a final order becomes citable case law for NRC proceedings. All of the cases mentioned below are either agency decisions or circuit cases cited by the agency.

201. *Natural Res. Def. Council v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972).

202. *Id.* at 841.

203. In the Matter of Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc., (CLI-10-11), Nuclear Regulatory Comm’n 37 (Mar. 26, 2010), (Order granting review of the Board’s decision dismissing Pilgrim Watch’s challenge of Entergy’s analysis of Severe Accident Mitigation Alternatives and remanding it to the Board for hearing).

204. *Id.*

205. *Id.*

206. *See id.*

CONCLUSION

This Note's discussion of attempts by Native American tribes to stall NRC actions using cultural resource challenges under NEPA should signal that tribes have a unique power to challenge agency actions in this area. Tribes are authorities on their cultural resources, and they can leverage their expertise during consultations with the NRC and license applicants. Ultimately, these challenges are not sufficient to unilaterally halt extraction projects. That became clear when, despite the NRC's inadequate cultural resource analysis in the DBP proceeding, both the court and the NRC left Powertech's license intact.

Furthermore, this Note shows that these cultural resource challenges have a more substantial impact on license applications when the resulting delay reduces the economic feasibility of projects. For example, after a lengthy administrative battle with the Oglala Sioux and other intervenors, Cameco Corporation suspended its expansion project at the Crow Butte location. The financial costs associated with navigating the NRC proceedings likely ruined the project. Unfavorable nuclear energy market conditions also played a role. Even so, tribes will not always be able to count on an unfavorable nuclear energy market to help them combat these projects. This is especially true now that the Trump Administration expressed support for reviving the nuclear energy market.²⁰⁷ In lieu of a changing economic landscape, tribes will have to evaluate the costs and benefits of engaging in lengthy administrative battles better-resourced corporations.

Despite the formidable challenges ahead, tribes should continue to use cultural resource challenges. Why? Until the NRC hones in on how it can complete its cultural resource studies with minimal tribal involvement, tribes will continue to have the ability to shape and inform the analysis to their benefit. Of course, this approach is only useful as long as tribes believe that litigation and participation in these administrative proceedings is worth their time and resources. Powertech first applied for its license in 2009, and the proceedings before the NRC are still ongoing. It is not clear how many tribes can afford to participate in such lengthy proceedings. Even so, some legal protection is better than no legal protection.

It is my hope that tribes will be able to use these challenges to better protect their land. Because of the legacy of uranium extraction on and near Native American lands, large and scenic areas have been left uninhabitable. Frankly, this waste of otherwise inhabitable land is not in society's short- or long-term best interest. A close friend of mine who worked as a school teacher in New Mexico told me stories about the billboards she passed throughout the state encouraging residents to seek health care for uranium exposure. I find it difficult

207. Julia Pyper, *Trump Signs Legislation to Promote Advanced Nuclear Reactor Technology*, GREEN TECH MEDIA (Oct. 1, 2018), <https://www.greentechmedia.com/articles/read/trump-signs-legislation-to-promote-advanced-nuclear-technology#gs.cVa6v81S>.

to envision tolerance for such a state of affairs in more urban areas populated with more non-Native Americans. NEPA was undoubtedly designed to protect against the type of degradation tribes in the Central and Southwest United States have experienced because of uranium extraction.

Perhaps the NRC could improve these proceedings by being a more independent regulator. The NRC involved industry groups in its early GEIS planning, but it did not incorporate the concerns of interested community groups to the same extent. Early involvement of interested community groups in strategic planning around cultural sites and resources *before* companies are allowed to submit extraction license applications could reduce conflict, ensure the protection of the most vital resources, and provide businesses with more economic certainty. It is in no party's best interest to lock into decades-long administrative battles. However, until the NRC appreciates this fact, the cultural resource challenges and endless litigation will persist.

Lastly, I want to point out that cultural resource challenges under NEPA are not limited to the context of the NRC; they are more broadly applicable. NEPA has always included broad and idealistic language encouraging federal agencies to protect not only ecological resources, but cultural resources as well. Part of the stated purpose of NEPA is to "declare a national policy which will encourage productive and enjoyable harmony between man and his environment."²⁰⁸ This language is not new, but it seems underutilized. I usually encounter challenges to disruptive projects based on their ecological impacts. However, challenges by non-Native Americans alleging that projects threaten their cultural resources are few and far between.

NEPA's inclusive language allowed the Oglala Sioux to continue to push for protections where the NRC could have denied them otherwise. NEPA allowed the Oglala Sioux to say, in essence, "It does not matter if you think that our land will not be contaminated by your facility. This land is sacred to us. If you disturb this land without taking the proper precautions, you will violate federal environmental law." In fact, the Oglala Sioux convinced the court to delay construction until the proper cultural resource surveys were completed. For a law without any substantive requirements, NEPA actually had some bite here.

If NEPA had force in these NRC proceedings, why is it that litigants do not argue for cultural resource protections under NEPA more often? Why is it that Non-Native Americans do not file suits seeking to force federal agencies to consider how their actions will impact cultural resources? There are, of course, key differences between Native Americans and non-Native Americans. Native American tribes are legally regarded as separate sovereigns. Agencies have issued policy manuals explaining how staff should work with tribes in this unique context. Federal statutes like the NHPA are also principally concerned with incorporating Native American tribes into decision making processes.²⁰⁹ There

208. 42 U.S.C. § 4321.

209. See 54 U.S.C. § 3001001 (1-4).

is no comparable guidance for non-Native Americans seeking cultural resource protections, but that should not dissuade people from seeking this type of protection.²¹⁰

Non-Native Americans have cultural resources that are sacred and meaningful too. I can only imagine the devastation that Non-Native Americans would experience if, for example, the infinitely majestic Yosemite National Park were opened up for drilling. I can only imagine how Non-Native Americans would feel if their favorite summer campgrounds, local parks, or beaches were eliminated by degrading projects licensed by federal agencies. Places like Yosemite mean something to all of us. These places are undoubtedly part of Non-Native American culture.

Legal scholars or activists could argue that Non-Native Americans should not try to mobilize NEPA to protect landscapes to which they have sentimental attachments because it would take away from the significance of landscapes protected for Native Americans. However, I would counter by stating that I encountered no evidence to suggest that the drafters intended for this NEPA provision to apply only to Native Americans. Furthermore, society benefits from a culture that errs on the side of preservation rather than destruction.

Critics of this approach may also advance a slippery slope argument. People will try to claim that every resource in their environment is a cultural one. Where would the courts draw the line? Admittedly, this is the challenge that lies ahead for courts and agencies that begin to hear more challenges from non-Native Americans.

While I recommend that adjudicators interpret NEPA broadly, a sensible limit to the use of this challenge could be a requirement that petitioners demonstrate that the cultural resource is of historic significance to a group of people. For example, my backyard would not qualify, but a local lake could. This approach would reduce the likelihood of frivolous filings and further communicate to the agencies the importance of the cultural resource protections sought. In so doing, it is my hope NEPA's resource protection provisions are more fully realized. In light of the threats posed by climate change, it is in the interest of the government, Native and non-Native Americans, and even businesses to work collaboratively to better preserve our natural resources.

210. See generally Jarrod Ingles, *A Narrative Understanding of NEPA Public Participation*, 46 *ECOLOGY L.Q.* 251, 555 (2019).

We welcome responses to this Note. If you are interested in submitting a response for our online journal, *Ecology Law Currents*, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, <http://www.ecologylawquarterly.org>.