# PUBLIC SUBMISSION

SUNSI Review Complete
Template=ADM-013
E-RIDS=ADM-03
ADD: Kim Conway, Antoinette Walker-Smith, Mary Neely

Comment (6)
Publication Date:1/24/2024
Citation: 89 FR 4631

**As of:** 2/26/24, 2:14 PM
**Received:** February 23, 2024
**Status:** Pending_Post
**Tracking No.** lsz-d3k4-eal9
**Comments Due:** February 23, 2024
**Submission Type:** Web

**Docket:** NRC-2023-0192
Pacific Gas and Electric Company; Diablo Canyon Nuclear Power Plant, Units 1 and 2

**Comment On:** NRC-2023-0192-0003
Notice of Intent To Conduct Scoping Process and Prepare Environmental Impact Statement; Pacific Gas and Electric Company; Diablo Canyon Nuclear Power Plant, Units 1 and 2

**Document:** NRC-2023-0192-DRAFT-0006
Comment on FR Doc # 2024-01355

## Submitter Information

**Email:** Nelson.chloe@epa.gov
**Government Agency Type:** Federal
**Government Agency:** EPA

## General Comment

Please see EPA's attached comments on the scoping notice to prepare a Supplemental Environmental Impact Statement for the proposed operating license renewal of Diablo Canyon Nuclear Power Plant; Docket ID NRC–2023–0192.

## Attachments

2024-02-23 EPA Scoping Comments_Diablo Canyon Nuclear PP

**REGION 9**

SAN FRANCISCO, CA 94105

February 23, 2024

Kim Conway
U.S. Nuclear Regulatory Commission
Office of Administration, Mail Stop: TWFN7A60M
Washington, DC 20555-0001

Subject: Scoping Notice to Prepare a Supplemental Environmental Impact Statement for the Proposed Operating License Renewal of Diablo Canyon Nuclear Power Plant, Units 1 & 2, San Luis Obispo County, California

Dear Kim Conway:

The U.S. Environmental Protection Agency has reviewed the Nuclear Regulatory Commission's January 24, 2024, Notice of Intent to prepare a Supplemental Environmental Impact Statement (SEIS) for the above-referenced project. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508) and our NEPA review authority under Section 309 of the Clean Air Act.

The operating license renewal application states that the Diablo Canyon Power Plant (DCPP) is a 2-unit nuclear-powered steam electric generating facility responsible for approximately 9% of California's in-state electricity production. DCPP comprises 750 acres and uses a once-through cooling Circulating Water System which draws water from and discharges back into the Pacific Ocean in San Luis Obispo County. The Notice of Intent states that the existing 40-year operating license will expire at midnight on November 2, 2024 for Unit 1 and on August 26, 2025 for Unit 2. The proposed license renewal being analyzed through the SEIS would extend reactor operations for an additional twenty years to provide an option that meets the state's projected energy demand requirements and ensures electric reliability during extreme weather events.

The EPA appreciates the opportunity to provide recommendations for analysis of the environmental and health impacts associated with the proposed relicensing process, and the identification of potential measures to avoid and minimize impacts of the existing, and future, project operations on the regional environment. As the Draft SEIS is being prepared, please consider the enclosed detailed recommendations addressing water and biological resources, hazardous waste management, air quality and climate change, cumulative impacts, environmental justice, and Tribal Consultation.

We look forward to continued participation in the NEPA process. If you have any questions, please contact me at (415) 972-3502 or nelson.chloe@epa.gov.

Sincerely,

CHLOE NELSON

Digitally signed by CHLOE NELSON
Date: 2024.02.23 16:23:04 -08'00'

Chloe Nelson
Environmental Review Branch

Enclosure: **EPA's Detailed Scoping Comments**

CC: Matthew T. Keeling, Executive Officer
Central Coast Regional Water Quality Control Board

Marc Elvin, Biologist
United States Fish and Wildlife Service

Laura Ingulsrud, West Coast Regional Policy Analyst, Office of National Marine Sanctuaries
National Marine Fisheries Service

Evelyn Barajas-Perez, Environmental Scientist
California Department of Fish and Wildlife

Emily Waddington, Air Quality Specialist
Santa Barbara County Air Pollution Control District

Andrew Mutziger, Division Manager – Planning, Monitoring & Grants
San Luis Obispo County Air Pollution Control District

Tom Luster, Senior Environmental Scientist
California Coastal Commission

**EPA'S DETAILED COMMENTS ON THE SCOPING NOTICE TO PREPARE A SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED OPERATING LICENSE RENEWAL OF DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 & 2, SAN LUIS OBISPO COUNTY, CALIFORNIA – FEBRUARY 23, 2024**

## General Comments

### *Purpose and Need*

The U.S. EPA recommends that the Draft SEIS for the proposed project clearly identify the underlying purpose and need (40 CFR 1502.13). We acknowledge that NRC's *Generic Environmental Impact Statement for License Renewal of Nuclear Plants*[1] establishes a purpose and need and recommend restatement in the plant-specific Draft SEIS to support a robust alternatives analysis. The purpose and need should be a clear, objective statement of the rationale for the proposed project, as it provides the framework for identifying project alternatives. The *purpose* of the proposed action is typically the specific objective(s) of the activity and is essential for defining the range of alternatives to be considered for the project. The *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity.

### *Range of Alternatives*

In the Draft SEIS, evaluate in detail all reasonable alternatives that fulfill the specific project's purpose and energy needs. Provide a clear discussion of the reasons for the elimination of alternatives that are not evaluated in detail. A robust range of alternatives includes options for avoiding significant environmental impacts and maximizing environmental benefits. Present the environmental impacts of the proposed action – beneficial and adverse – in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public (40 CFR 1502.14 (b)).

Describe how each alternative was developed, how it addresses project objectives (e.g., meeting future power generating needs), and how it will be implemented. Quantify the potential environmental impacts of each alternative to the greatest extent (e.g., acres of habitat impacted; change in water quality) and clearly delineate differences in impacts between alternatives analyzed. We also recommend comparing the costs and benefits of each of the alternatives, including the costs for required mitigation measures. Further, discuss reasons for eliminating alternatives to the proposed action (40 CFR 1502.14 (a)).

## Baseline Environmental Conditions

When evaluating project effects, we recommend using existing environmental conditions as the baseline for comparing impacts across all alternatives, including the no action alternative. This provides an important frame of reference for quantifying and/or characterizing magnitudes of effects and understanding each alternative's impacts and potential benefits. This is particularly important when there are environmental protections in place that are based on current conditions, such as total maximum daily loads (TMDLs) for impaired waters near DCPP. The most recent data used to compare the long-term effects of thermal discharges in the license renewal application are from 2014 in the Receiving Waters Monitoring Program report (pg. 3-153). By utilizing existing environmental conditions as a baseline, future changes to environmental resources can be more accurately measured for all alternatives, including the no action alternative.

---

[1] Nuclear Regulatory Commission. (2013, June). *NUREG-1437, Vol 1, Rev 1 Generic Environmental Impact Statement for License Renewal of Nuclear Plants Main Report, Final Report.* **https://www.nrc.gov/docs/ML1310/ML13106A241.pdf**

*Recommendations for the Draft SEIS:*

- Present impacts to resources as a comparison to the existing conditions baseline using a consistent method of measuring project impacts for all alternatives.
- Verify that historical data (e.g., data five years or older) are representative of current conditions.
- Include baselines for resources of concern with an explanation why those baselines were selected (e.g., physical and chemical characteristics of receiving waters near cooling water discharges).
- Include resources directly impacted by the project footprint within the geographic scope of analysis, as well as the resources indirectly (or secondarily) impacted by the project (40 CFR 1508.1(g)(1)).

**Water Resources**

Section 303(d) of the Clean Water Act requires that states, territories, and authorized Tribes identify waterbodies that do not meet water quality standards and develop, with EPA approval, Total Maximum Daily Loads for waters identified as impaired to meet established water quality criteria and associated beneficial uses. We recommend that the NRC require a baseline analysis of water quality, as discussed above, including collection of dissolved oxygen, temperature, and other parameters that are considered naturally occurring at enough frequency and duration to capture natural fluctuations due to seasonal changes in hydrology. While NPDES permitting requires annual monitoring of the marine environment near DCPP, reports do not include analysis or discussion of the results of biological and temperature monitoring. Given DCPP's previous impacts on receiving waters from past and ongoing cooling water discharges, surface water quality degradation is one of the EPA's primary concerns with the proposed license renewal. Understanding the setting for the project is important for preparing an impact analysis.

*Recommendations for the Draft SEIS:*

- Provide a hydrologic characterization of the project vicinity and adjacent areas which could be affected by the Project, describing surface water quality, quantity, and flow regimes. Describe water quality standard and beneficial uses.
- Discuss historical contamination within the affected watershed, the effectiveness and status of remediation activities, and potential effects to clean-up goals or progress from the proposed Project, if applicable.
- Disclose information regarding relevant TMDL allocations for any impaired waters listed on the latest state CWA 303(d) list or Integrated Report, along with the water quality standards and pollutants of concern.
- Identify water bodies likely to be impacted by the project, the nature of the potential impacts, and the specific discharges and pollutants likely to impact those waters. Include a map to illustrate where these waterbodies are within the project area.
- As the CWA anti-degradation provisions will also apply, demonstrate that the proposed action will comply with anti-degradation provisions of the CWA that prevent deterioration of water quality within waterbodies that currently meet water quality standards.
- Where TMDL analyses for impaired waterbodies within or downstream of the project area still needed to be developed, ensure that proposed treatments are carefully managed to prevent any worsening of the impairment or avoided altogether where such impacts cannot be prevented.

***Clean Water Act Section 404 Applicability***

Confirm with the U.S. Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit for discharge of dredged or fill materials into waters of the United States, including wetlands and "special aquatic sites." If potential impacts to waters of the U.S. are found, the EPA recommends coordinating with both EPA and Corps as the CWA permitting strategy is initiated.

*Recommendations for the Draft SEIS:*

- Identify the physical, chemical, and biological functions and values of the existing jurisdictional waters and describe how the proposed project may impact existing and future functions.
- Specify the acreage and channel lengths and habitat types of waters of the U.S that may be impacted.
- Describe the potential environmental impacts and discuss alternatives to avoid or minimize discharges, and potential measures to mitigate potential impacts.

***Cooling Water Intake, Impingement and Entrainment***

The State Water Resources Control Board's Once-Through Cooling (OTC) Policy establishes technology-based standards to implement Section 316(b) of the Clean Water Act by requiring cooling water intake structures to reflect the best technology available to protect aquatic life. According to the license renewal application, DCPP's compliance with these statutory guidelines relies on impingement data collected in 1985-86 and entrainment studies from 2008-09 to demonstrate that the current cooling water intake structure represents the best available technology to minimize adverse environmental impacts (pg. 4-22). The license renewal application further states that no cooling system modifications are planned that would alter discharge or the intake structure for the proposed license renewal period. The SEIS is an appropriate forum to confirm that the data collected in 1985-1986 and 2008-2009 is still current and adequately compensates for environmental impacts and marine life lost through impingement mortality and entrainment.

*Recommendations for the Draft SEIS:*

- Work with the Central Coast Regional Water Quality Control Board (CCRWQCB) to conduct new impingement and entrainment studies to establish current baseline data and monitor rate changes.
- Work with the CCRWQCB to incorporate ongoing entrainment monitoring during power plant intake operations.
- Consider feasibility of implementing best available technology (e.g., closed-cycle wet cooling).
- Identify and describe proposed mitigation measures associated with DCPP, specifying the responsible party (NRC or another federal, state, or local agency), timeline and frequency for deployment, entity responsible for tracking/reporting mitigation, and publicly available information about mitigation implementation and success.

***Aquatic Resources, Wetlands and Riparian Zones***

Continued DCPP operation and maintenance may affect a variety of aquatic resources. This project has potential to degrade habitat for fish and other aquatic biota, and these resources may experience varying degrees of impacts and alteration of their hydrologic functions.

*Recommendations for the Draft SEIS:*

- Describe aquatic habitats in the project area (e.g., habitat type, plant and animal species, functional values, and integrity) and the environmental impacts of the proposed alternatives on these resources.
- Evaluate impacts to aquatic resources in terms of the areal (acreage for wetlands) or linear extent (for streams) to be impacted and by the functions they perform.
- For impacts that cannot be avoided, describe the types, location, and estimated effectiveness of best management practices to minimize and mitigate impacts to aquatic resources.

**Biological Resources, Habitat, and Wildlife**

***Sensitive, Threatened and Endangered Species and Wildlife***

Coordinating closely with the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and the California Department of Fish and Wildlife (CDFW) will be important for fully analyzing, and disclosing, potential impacts of the project on plant and wildlife species, especially species classified rare, threatened, or endangered on either state or federal lists. Further, we recommend that the Draft SEIS confirm coordination with NMFS regarding continued DCCP operations and any considerations necessary for compatibility with the Chumash Heritage National Marine Sanctuary. Continued plant operations may extend beyond the timeframe originally analyzed for previous consultations.

*Recommendations for the Draft SEIS:*

- Identify all petitioned and listed, threatened, and endangered species and critical habitat that might occur within the project area (i.e., California red-legged frog, southern sea otter, steelhead trout). Identify and quantify which species and/or critical habitat might be affected by each alternative and mitigate impacts to these species. Place emphasis on the protection and recovery of species due to their status or potential status under the federal ESA and state protections.
- Include general locations of rare or special status plants and disclose how these sites would be managed to avoid impacts on the plants.
- Discuss the project's consistency with federal or state species' protections.
- Consult with FWS, NMFS, and CDFW to develop a current Biological Assessment, Marine Biological Resources Assessment, Biological Opinion, and Incidental Take Permit(s), as applicable. Summarize this information or include as an appendix.
- Discuss mitigation measures to minimize impacts to special status species, describe the effectiveness of such measures to protect wildlife, and indicate how they would be implemented and enforced.
- Analyze and disclose direct, indirect, and cumulative impacts to other wildlife species that might be affected by each alternative and identify measures to avoid, minimize, and mitigate for those impact.
- Discuss the project's consistency with existing laws and regulations, including the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

***Invasive Species***

Executive Order 13112, Invasive Species, and Executive Order 13751, Safeguarding the National from the Impacts of Invasive Species emphasize the importance of preventing the introduction, establishment, and spread of invasive species, and eradicating and controlling populations of invasive

species that are established. Invasive species pose threats to prosperity, security, and quality of life and have negative impacts on the environment and natural resources. We encourage the NRC to identify in the SEIS how the proposed action will be consistent with the goals and objectives of the executive orders addressing invasive species.

*Recommendations for the Draft SEIS:*

- Include measures that are consistent with E.O.s 13112 *Invasive Species* and 13751 *Safeguarding the Nation from the Impacts of Invasive Species* and any existing NRC direction for noxious weed management.
- Promote integrated pest and weed management, prioritizing management techniques that focus on non-chemical treatments first.
- Identify measures for the early recognition and control of new invasive species infestations.
- Commit to avoidance of future use of pesticides and herbicides, which could have indirect impacts on biodiversity, water quality, and aquatic resources.
- Discusses measures that would be implemented to reduce the likelihood of introduction and spread of invasive species within the project area.

**Hazardous Waste Management and Pollution Prevention**

The proposed license renewal would result in an additional 20 years of waste generation to be stored either onsite in the spent uranium fuel pool cooling system and in dry cask storage or shipped offsite to licensed disposal facilities in either Tennessee, Washington, Utah, or Texas, depending on the waste type and hazard classification. Until a federal government repository is established, DCPP's onsite Independent Spent Fuel Storage Installation site must store all spent fuel indefinitely.

*Recommendations for the Draft SEIS:*

- Address the potential direct, indirect, and cumulative impacts of waste generation, including radioactive waste.
- Identify the projected waste types and volumes, and expected storage, disposal, and management for the proposed license renewal term.
- Identify the applicability of federal hazardous waste requirements.
- Discuss how the generation of hazardous waste would be minimized.
- Discuss the likelihood that potential health hazards from radioactive waste handling, packaging, and shipping offsite could affect workers or the public and include an analysis of such health hazards.
- Disclose prevention and emergency response procedures in place to prevent hazardous substance spills and exposures.

***Offsite Disposal***

The EPA is concerned about shipments of hazardous materials to and from the site. We appreciate DCPP's historical compliance with CERCLA and the Hazardous Materials Transportation Act and recommend additionally developing a Transportation Risk Assessment that estimates the magnitude of risks presented and identifies a choice among alternative routes with the lowest risk.[2] Leakage or spillage from accidents or mishandling when transporting hazardous materials may pose major threats

[2] See the Department of Energy's Recommendations for Analyzing Accidents under NEPA, **https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-DOE-AccidentAnalysis.pdf**

to property, safety, and environmental degradation. The SEIS provides a forum to fully analyze and disclose all risk reduction strategies.

*Recommendations for the Draft SEIS:*

- Commit to Applicant Committed Environmental Protection Measures and provide San Luis Obispo County and the California Highway Patrol with uranium-specific emergency response training and materials.
- Prepare an accident analysis along transportation routes, identifying both the probability and consequences of a maximum reasonably foreseeable accident. Characterize the degree to which buildings, land, and environmental media or biota would be contaminated from an accident. Describe direct and indirect effects associated with potential cleanup activities.
- Describe measures in place to protect the public and workers from potential radiological exposure through transportation of offsite shipments.
- Identify any low-income or minority populations that might be disproportionately impacted by the transportation of radioactive wastes to interim or permanent disposal facilities. Describe methodologies for identifying impacts to all communities, and to those with environmental justice concerns, along the entirety of potential shipment routes and at the ultimate disposal destination. Consider the use of the EJScreen environmental justice screening and mapping tool[3], further described in the Environmental Justice section below, to define impact communities. Describe how NRC would engage with communities with environmental justice concerns, if any are identified, in the development of the Draft SEIS and mitigation for transportation impacts.

**Air Quality**

A discussion of existing, ambient air conditions, National Ambient Air Quality Standards, and criteria pollutant non-attainment areas in the analysis area and vicinity is needed in the Draft SEIS. Understanding the baseline conditions in the project area is helpful for understanding the context of potential project impacts, demonstrating compliance with state and federal air quality regulations, and disclosing the potential impacts from temporary or cumulative degradation of air quality. We note that the project area is in attainment for all criteria air pollutants, but four neighboring counties contain non-attainment areas for 2015 8-hour ozone.

*Recommendations for the Draft SEIS:*

- Characterize existing air quality conditions to set the context for evaluating project impacts, including identification of:
  - Class I areas, which are afforded special protections under the Clean Air Act.
  - Sensitive receptors in the vicinity (such as population centers, nonattainment areas, and Class II areas with sensitive resources).
  - Airshed classifications and monitored baseline conditions for each criteria pollutant.
  - Any regional concerns in the area (e.g., ozone, $PM_{2.5}$, seasonal wildfire smoke).
- Evaluate whether all proposed project activities could affect air quality, both onsite and for all activities occuring offsite (transportation included) and analyze reasonable and practicable mitigation measures to reduce project-related emissions. Typical mitigation measures include fugitive dust control measures, mobile and stationary source controls, and administrative controls.

[3] **https://www.epa.gov/ejscreen**

- Discuss the timeframe for release of criteria pollutant emissions through the license lifespan of the proposed project including maintenance, offsite waste transportation, and decommissioning activities.
- Ensure the Draft SEIS includes a comprehensive list of all design features and mitigation measures to be implemented as part of the project.

**Climate Change**

Consistent with the goals of Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, we encourage measures that provide for diverse, healthy ecosystems that are resilient to climate stressors; require effective mitigation and encourage voluntary mitigation to offset the adverse impacts of projects or actions; and reduce greenhouse gas emissions from authorized activities to the lowest practical levels. California has one of the most variable climates in the United States, and it is getting more extreme, marked by long periods of warm, dry conditions punctuated by stronger and wetter atmospheric river storms.

*Recommendations for the Draft SEIS:*

- Include an analysis of greenhouse gas emissions and climate change impacts, consistent with the *Council on Environmental Quality National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*[4] (January 2023).
- Discuss how climate change could potentially influence the proposed project area, and how the proposed license renewal could worsen, lessen or potentially mitigate for these impacts. Consider anticipated changes to the watershed in terms of sea level rise and extreme precipitation events and how these changes may impact the hydrology in the project area.
- Include a robust discussion of climate change and its potential effects on the proposed 20-year continuation of plant operations and DCPP's impacts. We recommend the Draft SEIS include a summary of applicable climate change studies, including their findings on potential environmental effects such as flood risk and impacts to water supply.

***Cumulative Impacts***

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.1(g)(3)). Considering all the actions in this area together helps decision makers and the public to understand more clearly what the cumulative impacts on environmental resources are likely to be. The Council on Environmental Quality's *Considering Cumulative Effects Under the National Environmental Policy Act*[5] guidance and the EPA's *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*[6] guidance may serve as useful resources to assess the adequacy of the cumulative impact assessment.

---

[4] **https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate**

[5] Council on Environmental Quality. (1997, January). *Considering Cumulative Effects Under the National Environmental Policy Act*. **https://ceq.doe.gov/publications/cumulative_effects.html**

[6] Environmental Protection Agency. (1999, May). *Consideration of Cumulative Impacts in EPA Review of NEPA Documents*. **https://www.epa.gov/sites/production/files/2014-08/documents/cumulative.pdf**

*Recommendations for the Draft SEIS:*

- Describe the potential cumulative impacts associated with the proposed project and past, present, and reasonably foreseeable actions in and outside the analysis area, including those outside of NRC's jurisdiction.
- Include a description of the affected environment that focuses on each affected resource or ecosystem. Identify the affected environment through meaningful impacts and natural boundaries rather than predetermined geographic areas.
- Focus on resources of concern, i.e., those resources that are "at risk" and/or are significantly affected by the proposed project, before mitigation. Identify which resources are analyzed, which ones are not, and why.
- Include a description of existing and anticipated future conditions in the project area to demonstrate how environmental conditions, such as temperature and precipitation regimes, are expected to change in the hydrographic area through the anticipated life of the project, including post-closure activities.
- For impacts that occur in combination with other trends and reasonably foreseeable effects, discuss what mitigation may be implemented. Clearly state who would be responsible for mitigation measures, a timeline for implementation, responsible agency, and how mitigation implementation would be ensured.

**Seismicity**

Diablo Canyon's affected environment lies within a network of seismically linked fault zones which include the San Andreas, Hosgri, and Shoreline faults. According to the license renewal application, the NRC completed an independent assessment of the Shoreline fault zone's seismic source characteristics and estimated potential ground motions, concluding that DCPP demonstrates a reasonable assurance of safety and that a plant-specific seismic backfit would not be warranted (pg. 3-67).

*Recommendation for the Draft SEIS:* Include a seismicity section to further describe the regional fault-system dynamics and include any earthquake hazard reduction measures implemented since the publication of the seismic risk assessment.

**Environmental Justice**

Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994) and Executive Order 14096 *Revitalizing Our Nation's Commitment to Environmental Justice for All* (April 26, 2023) direct federal agencies to identify, analyze, and address disproportionate and adverse human health and environmental effects and risks of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns.

*Recommendation for the Draft SEIS:* Include a robust environmental justice section in the SEIS to analyze potential disproportionate and adverse impacts to minority and low-income populations. The following subsections detail the environmental justice outreach and information needed for this project.

***Demographic Data***

EJScreen, EPA's environmental justice screening and mapping tool, offers a variety of data and mapping capabilities that enable users to understand demographic details about the population of an

area and the environmental conditions in which they live. For this project, assessing data from EJScreen is a useful first step in identifying minority and low-income populations within and in proximity to the project area.

When identifying minority populations, please note that a 50 percent standard does not apply if "the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis."[7] To best illustrate the presence of a minority population, analyzing block groups is advised since using larger tracts, such as cities and counties, often dilute the presence of these populations.

*Recommendations for the Draft SEIS:*

- Use EJScreen or other U.S. Census Bureau data to identify low-income and minority populations by using block groups. We suggest comparing block group data to state data when determining the presence of these populations.
- Identify the presence of linguistically isolated populations and medically unserved areas, as well as any other critically relevant demographic information.
- Supplement data with state and county level reports and local knowledge.

***Disproportionate and Adverse Impacts***

Disproportionate and adverse impacts may not be inherently clear as impacts for all populations may appear similar; however, the social determinants of health, or "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life",[8] play a large role in assessing disproportionate and adverse impacts. According to the *Promising Practices for Environmental Justice Methodologies in NEPA Reviews*[9] report, "any identified impact to human health or the environment (e.g., impacts on noise, biota, air quality, traffic/congestion, land use) that potentially affects minority populations and low-income populations in the affected environment" might result in disproportionate and adverse impacts. Examples of disproportionate impacts include changes in existing ecological, cultural, economic, or social resources or access; health disparity from exposure to toxins; cumulative or multiple adverse exposures from environmental hazards; and community disruption.

*Recommendations for the Draft SEIS:* When deciding whether an impact may be disproportionate and adverse:

- Identify and describe any unique conditions of the potentially affected minority populations and low-income populations that may be affected by the proposed action, including:
  - Social determinants of health.
  - Human health vulnerabilities (e.g., heightened disease susceptibility, health disparities).

---

[7] Council on Environmental Quality (1997, December). Environmental Justice: Guidance Under the National Environmental Policy Act. **https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf**

[8] U.S. Center for Disease Control and Prevention. (2022, December). Social Determinants of Health at CDC. **https://www.cdc.gov/about/sdoh/index.html**

[9] Federal Interagency Working Group on Environmental Justice & NEPA Committee (2016, March). Promising Practices for EJ Methodologies in NEPA Reviews. **https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf**

- Socioeconomic vulnerabilities (e.g., reliance on a particular resource that may be affected by the proposed action, disruptions to community mobility and access as a result of infrastructure development)
- Cultural vulnerabilities (e.g., traditional cultural properties).

- Apply methods from the *Promising Practice for Environmental Justice Methodologies in NEPA Reviews* report to this project. This report provides useful guidance in assessing the potential direct and indirect impacts of a project, as well as the potentially increased vulnerabilities certain populations may have due to the cumulative impacts of environmental harm.

***Meaningful Public Engagement***

Executive Order 14096, *Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All*, directs federal agencies to provide opportunities in the NEPA process for early and meaningful involvement for communities with environmental justice concerns that may be potentially affected by a proposed action.

*Recommendations for engagement as the Draft SEIS is being prepared:*

- Provide early and frequent outreach and engagement opportunities to collect and incorporate community feedback throughout the NEPA process.
- Provide translation services to accommodate linguistically isolated populations, as applicable.
- Address technology barriers that may prohibit participation from affected communities.
- Ensure that meetings are scheduled at a time and location that is accessible for community participants, including scheduling meetings after work hours and on weekends as appropriate.
- Provide ample notice of meetings and commenting opportunities so that community members have sufficient time to prepare and participate.
- Promote engagement opportunities within appropriate outlets used by affected communities, such as newspapers, radio, and social media.
- Ensure that all project-related information is conveyed using plain language so that community members of varied reading proficiencies can readily understand the project-related information.
- Review and consider community feedback provided during the NEPA process.

- Document actions taken by the NRC to provide opportunities for meaningful public engagement.
- Disclose any community concerns, even those outside the jurisdiction of the NRC.
- Describe how community feedback is reflected in the NRC's NEPA decision-making process.

**Cultural Resources**

***Consultation with Tribal Governments***

It is important that the NRC initiate formal government-to-government consultation under Section 106 of the National Historic Preservation Act as early as possible to ensure time to adequately address issues in the Draft SEIS.

*Recommendations for the Draft SEIS:*

- Summarize the results of tribal consultation and identify the main concerns expressed by tribes (if any), and how those concerns were addressed.

- Discuss how the NRC will avoid, minimize, or mitigate adverse effects on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, throughout the project area.
- Utilize the Section 106 review process to ensure that the requirements of Executive Order 13007 *Indian Sacred Sites* (May 24, 1996) are fulfilled.[10]

- Refer to the National Association of Tribal Historic Preservation Officers' *Tribal Consultation: Best Practices in Historic Preservation*[11] and the Advisory Council of Historic Preservation's *Consultation with Indian Tribes in the Section 106 Review Process: The Handbook*[12] guidance documents may serve as useful resources.

***Indigenous Knowledge***

Since Indigenous Knowledge is unique and specific to a Tribe and may exist in a variety of forms, consultation and collaboration with Tribal Nations is critical to ensuring that Indigenous Knowledge is considered and applied in the NEPA process.

*Recommendations for the Draft SEIS:*

- Identify, and integrate Indigenous Knowledge into the EIS analysis, as appropriate.
- Where available, include the collection of local and traditional knowledge concerning the affected environment, anticipated impacts from the project, and traditional hunting and land use patterns in the area.
- CEQ's *Guidance for Federal Departments and Agencies on Indigenous Knowledge*[13] may serve as a useful resource to address Indigenous Knowledge in the Draft SEIS.

---

[10] It is important to note that a sacred site may not meet the NRHP criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside the direct impact area the plan area may also have religiously significant ties to lands within the plan area and should be included in the consultation process.

[11] National Association of Tribal Historic Preservation Officers. (2005, May). *Tribal Consultation: Best Practices in Historic Preservation*. **http://www.nathpo.org/PDF/Tribal_Consultation.pdf**

[12] Advisory Council of Historic Preservation. (2021, June). *Consultation with Indian Tribes in the Section 106 Review Process: The Handbook*. **https://www.achp.gov/sites/default/files/2021-06/ConsultationwithIndianTribesHandbook6-11-21Final.pdf**

[13] Council on Environmental Quality. (2022, November 30). *Guidance for Federal Departments and Agencies on Indigenous Knowledge*. **https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf**