

**From:** O'NEILL, Martin <mjo@nei.org>  
**Sent:** Friday, October 29, 2021 7:19 PM  
**To:** NRC-EJReview Resource  
**Cc:** GINSBERG, Ellen; Bielecki, Jessica; Fetter, Allen; Suber, Gregory  
**Subject:** [External\_Sender] Docket ID NRC-2021-0137 -- Nuclear Energy Institute's Comments Regarding the NRC's Systematic Assessment of Its Environmental Justice Programs, Policies, and Activities  
**Attachments:** Cover Letter for NEI Environmental Justice Comments\_\_FINAL (10-29-2021).pdf; NEI Comments on NRC Environmental Justice Program\_\_FINAL (10-29-2021).pdf

Dear NRC Program Management, Announcements and Editing Staff  
On behalf of Ellen Ginsberg, Sr. Vice President, General Counsel and Secretary of the Nuclear Energy Institute (NEI), please find attached to this email NEI's comments submitted in response to the NRC's Systematic Assessment for How the NRC Addresses Environmental Justice in Its Programs, Policies, and Activities, 86 Fed. Reg. 36,307 (July 9, 2021), for which the comment period was extended to October 29, 2021 by *Federal Register* Notice dated September 10, 2021 (86 Fed. Reg. 50,745). **Please confirm receipt of these comments.**

Please feel free to contact Ms. Ginsberg or me by email or phone if you have any questions regarding this submittal. NEI appreciates the opportunity to submit comments.

Regards,  
Martin O'Neill



**Martin J. O'Neill | Associate General Counsel**  
Nuclear Energy Institute  
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October 29, 2021

Attn: Program Management, Announcements and Editing Staff  
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U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

*Submitted via NRC-EJReview@nrc.gov*

**Subject: Nuclear Energy Institute's Comments Regarding the NRC's Systematic Assessment of Its Environmental Justice Programs, Policies, and Activities (Docket ID NRC-2021-0137)**

The Nuclear Energy Institute (NEI)<sup>1</sup> submits the attached comments in response to the Nuclear Regulatory Commission's (NRC) request for comments regarding its systematic review of how the agency's programs, policies, and activities address environmental justice (EJ).<sup>2</sup> NEI appreciates the opportunity to provide the industry's views on this important topic and looks forward to further engagement with the NRC and public.

We commend the NRC for undertaking this evaluation, as it reflects the agency's recognition of the administration's efforts to elevate and meaningfully address environmental justice. The NRC's efforts to advance environmental justice date back to March 1994, when Chairman Selin committed to carry out President Clinton's 1994 Executive Order 12898 in meeting the agency's obligations under the National Environmental Policy Act (NEPA). The NRC has endeavored to adhere to that commitment for more than 25 years, as evidenced by its 2004 EJ Policy Statement,<sup>3</sup> related guidance, and integration of EJ reviews into its licensing and regulatory activities.

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<sup>1</sup> NEI is the trade association for the commercial nuclear technologies industry. NEI's mission is to promote the use and growth of nuclear energy through efficient operations and effective policy. NEI has hundreds of members, and its membership includes companies licensed to own or operate commercial nuclear power plants in the United States, as well as nuclear plant designers, major architectural and engineering firms, entities that process nuclear fuel, and other organizations involved in the nuclear industry.

<sup>2</sup> See Systematic Assessment for How the NRC Addresses Environmental Justice in Its Programs, Policies, and Activities, 86 Fed. Reg. 36,307 (July 9, 2021) (NRC Request for Comment). The NRC extended the comment period to Oct. 29, 2021. See 86 Fed. Reg. 50,745 (Sept. 10, 2021).

<sup>3</sup> Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040 (Aug. 24, 2004) (EJ Policy Statement).

As President Biden’s Executive Orders make clear, the administration has made environmental justice a government-wide priority and a core tenet of its social, environmental and climate-related initiatives. Preserving and expanding nuclear generation is vital to meeting U.S. and global clean energy goals and mitigating the most serious effects of climate change. As Secretary of Energy Jennifer Granholm recently noted: “Carbon-free nuclear power is an absolutely critical part of our decarbonization equation.”<sup>4</sup> Nuclear energy produces over half (52%) of carbon-free electricity generation in the U.S., and 29% of clean energy globally.<sup>5</sup> In addition to not producing carbon emissions, nuclear energy also does not produce other harmful air pollutants (such as sulfur oxides, nitrogen oxides, and mercury) and keeps air clean and free of particulate matter for communities where nuclear facilities are located. Nuclear energy also has among the lowest overall life-cycle carbon emissions of any generation source.<sup>6</sup> In addition to the numerous environmental benefits of nuclear technologies, the industry also has a well-established record of providing significant socioeconomic benefits. Thus, nuclear energy has a clear role to play in advancing environmental and climate justice.

NEI has undertaken a detailed review of the NRC’s EJ Policy Statement, regulatory guidance, and relevant precedent to inform our evaluation of the NRC’s approach to environmental justice, as well as learning from other participants in the public sessions the agency has held. Our effort led to the development of the attached comments and the following overarching conclusions.

**1. The NRC’s overall EJ framework is sound, but the agency should enhance its implementation of that framework.**

The NRC has a detailed framework in place for identifying, evaluating, and addressing EJ issues within the context of the agency’s mission to protect radiological health and safety and the common defense and security. Although broad-gauge changes to that framework are not warranted, we believe the NRC should make certain targeted enhancements to its implementation of its EJ policy and framework. Specifically, the NRC should consider taking additional actions to:

- ensure that the agency uses the most relevant and up-to-date EJ-related data and tools in identifying EJ communities and potentially disproportionate environmental impacts to those communities;
- assess the agency’s implementation of its EJ review methodologies and procedures, especially as they relate to identifying and engaging EJ communities through appropriate public outreach, engagement, and participation opportunities;

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<sup>4</sup> World Nuclear News, “USA needs nuclear to achieve net zero, says Granholm” (June 17, 2021), <https://world-nuclear-news.org/Articles/USA-needs-nuclear-to-achieve-net-zero-says-Granholm>.

<sup>5</sup> International Energy Agency, *Nuclear Power in a Clean Energy System* (May 2019), <https://www.iea.org/reports/nuclear-power-in-a-clean-energy-system>; U.S. Energy Information Administration, “Electric Power Monthly ES1.B” <https://www.eia.gov/electricity/monthly/>.

<sup>6</sup> See International Atomic Energy Agency, *Nuclear Power and Sustainable Development*, at 5, 38, 50-51 (2016), <http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1754web-26894285.pdf>.

- ensure public accessibility both to the NRC’s web-based electronic documents and resources by significantly improving the ADAMS system to make it user friendly, and to live meetings by involving communities in which broadband may not be available or widely used;
- examine other agencies’ EJ procedures and methodologies to identify best practices and assess their potential use in NRC EJ analyses;
- optimize NRC participation in EJ-related interagency activities;
- clarify the relationship between the NRC’s Tribal Policy Statement and Tribal Protocol Manual and its EJ Policy Statement and related guidance;
- include in EJ reviews appropriate discussion of climate change impacts as well as nuclear energy’s benefits as a non-emitting source that avoids certain disparate impacts on EJ communities;
- clarify the limits of NRC authority to require specific mitigation measures; and
- clarify when the NRC must perform an EJ review for a proposed action for which it prepares an environmental assessment.

## **2. NEPA is the proper vehicle for considering EJ issues in NRC proceedings.**

As the Commission explained in its EJ Policy Statement, the NRC is limited under the Atomic Energy Act of 1954, as amended (AEA), to the consideration of issues involving radiological health and safety and the common defense and security. Insofar as the NRC’s safety regulations also include environmental protection requirements, those requirements are directly linked to the Commission’s AEA authority to license and regulate certain nuclear materials and facilities based on radiological health and safety and the common defense and security. NEPA, in contrast, serves two primary purposes: (1) to ensure that federal agencies take a “hard look” at the environmental consequences of a federal action before reaching major decisions; and (2) to inform the public, Congress and other agencies of those consequences.

Given NEPA’s purposes, the NRC’s practice of considering EJ concerns through the NEPA process is both logical and practical. It is logical because the goals of environmental justice are consistent with the key goals of NEPA, including the federal government’s duty to use all practicable means to create and maintain conditions under which humans and nature can exist in “productive harmony”, and to incorporate environmental considerations into agency decision-making through a systematic interdisciplinary approach. The NRC’s EJ Policy Statement correctly notes that NEPA mandates NRC analysis of disproportionately high and adverse impacts to EJ communities as part of the agency’s NEPA obligations to accurately identify and disclose all significant environmental impacts associated with a proposed action.

The NRC’s use of the NEPA process to consider and address EJ issues also makes practical sense because NEPA mandates openness and clarity. NEPA provides for early and extensive public participation through timely-noticed public meetings, an initial scoping process that includes public

participation, publication of a draft environmental impact statement (EIS) for review and comment by the public and other agencies, and opportunities to participate in the NRC adjudicatory process.

### **3. The Industry Takes Meaningful Steps to Achieve Environmental Justice.**

Although the NRC has a duty to appropriately consider EJ issues as part of its licensing and regulatory activities, it must do so within the context of its discrete statutory mission and authorities. Broad issues of social and economic equity lie beyond the scope of NEPA and NRC's authority. Advancing environmental justice requires efforts beyond the NRC's process. To that end, NEI has undertaken an EJ initiative, which has led to the articulation of the following principles emphasizing the importance of the industry:

- actively engaging with disadvantaged communities<sup>7</sup> to enhance mutual trust and understanding;
- integrating EJ considerations into business and operational practices;
- supporting efforts that help local, disadvantaged communities share in the benefits from industry operations and activities; and
- supporting public policies based on mutual respect and justice.<sup>8</sup>

NEI's principles reflect the broad view of the industry and are consistent with the actions our members have taken—and continue to take—to include EJ considerations as part of their business decisions and operations. Broadly summarized, industry actions are wide-ranging and involve:

- establishing EJ policies and goals (company-wide policies setting EJ goals or documenting the organization's commitment to environmental justice);
- ensuring governance and oversight of EJ issues and programs (incorporation of EJ considerations into board-level governance and governance materials; dedicated board members, committees, and senior managers with oversight and designated EJ-related duties);
- maintaining EJ operational controls (stakeholder engagement mechanisms, project development review procedures, EJ training and education for employees, and environmental management systems to capture and track compliance with applicable EJ laws); and
- implementing EJ initiatives and related programs (efforts designed specifically to help minority, low-income, or otherwise disadvantaged communities, and internal programs that incentivize consideration of EJ or social justice issues).

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<sup>7</sup> Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," 86 Fed. Reg. 7619 (Feb. 1, 2021), uses the phrase "disadvantaged communities," and this term has been used in federal and state programs related to environmental justice. We recognize that some community members and advocates may prefer alternative terminology, such as "overburdened and underserved communities." In our comments, we generally use the term "EJ communities", but also refer to such communities as "disadvantaged communities" and "underserved communities."

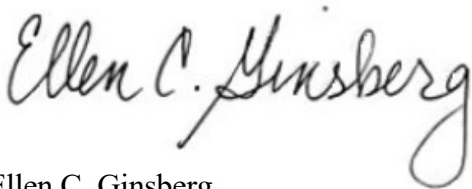
<sup>8</sup> See NEI, "Environmental Justice Principles," <https://www.nei.org/resources/environmental-justice-principles>.

\* \* \* \*

We think it is useful for the NRC to periodically review its established processes and it is timely to review its approach to environmental justice. We would expect the review to identify opportunities to enhance the agency's consideration of environmental justice, and to transparently inform the public of its findings and any actions that the NRC undertakes as a result of its review.

Thank you in advance for your consideration of NEI's comments. If you have any questions or require additional information, please feel free to contact me or Martin O'Neill, Associate General Counsel (202-739-8139 or [mjo@nei.org](mailto:mjo@nei.org)).

Sincerely,

A handwritten signature in black ink that reads "Ellen C. Ginsberg". The signature is written in a cursive style with a large, looping 'g' at the end.

Ellen C. Ginsberg

Attachment: Nuclear Energy Institute's Comments Regarding the NRC's Systematic Assessment of the Agency's Environmental Justice Programs, Policies, and Activities

Cc: Jessica Bielecki, NRC/OGC/LHE/MFW  
Alan Fetter, NRC/ NRR/DNRL/NRLB  
Gregory Suber, NRC/NRR/DORL



## ATTACHMENT

### **Nuclear Energy Institute's Comments Regarding the NRC's Systematic Assessment of the Agency's Environmental Justice Programs, Policies, and Activities (Docket ID NRC-2021-0137)**

#### **I. Introduction**

Environmental justice (EJ) is commonly defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with regard to the development, implementation, and enforcement of environmental laws, regulations, and policies.<sup>1</sup> President Biden has made EJ a “government-wide” regulatory priority and a core tenet of his policy initiatives. Through Executive Orders (E.O.) 13990 and 14008, the President has sought to restructure federal EJ institutions, create new task forces, revitalize EJ enforcement efforts, and channel benefits from federally-funded infrastructure projects to underserved or disadvantaged communities.<sup>2</sup>

The Biden administration is also pursuing ambitious climate-change goals, including achieving net greenhouse gas neutrality. Preserving and expanding nuclear generation is vital to meeting U.S. and global clean energy goals and mitigating the most serious effects of climate change. As Secretary of Energy Jennifer Granholm recently noted: “Carbon-free nuclear power is an absolutely critical part of our decarbonization equation.”<sup>3</sup> Nuclear energy produces over half (52%) of carbon-free electricity generation in the U.S., and 29% of clean energy globally.<sup>4</sup> In addition to not producing carbon emissions, nuclear energy also does not produce other harmful air pollutants (such as sulfur oxides, nitrogen oxides, and mercury) and keeps air clean and free of particulate matter for communities where nuclear facilities are located. Nuclear energy also has among the lowest overall life-cycle carbon emissions of any generation source.<sup>5</sup> In addition to the numerous environmental benefits of nuclear technologies, the industry also has a notable record of providing socioeconomic benefits. Thus, nuclear energy has a clear role to play in advancing environmental and climate justice.

The NRC has been addressing EJ issues in its licensing reviews for more than 25 years. During that time, the agency periodically has evaluated and improved its EJ programs and related guidance.<sup>6</sup> As a result, the NRC has taken, and continues to take, a hard look at EJ issues in meeting its obligations

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<sup>1</sup> Environmental Protection Agency (EPA), “Environmental Justice”, <https://www.epa.gov/environmentaljustice>.

<sup>2</sup> See E.O. 13990, “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,” 86 Fed. Reg. 7037 (Jan. 25, 2021); E.O. 14008, “Tackling the Climate Crisis at Home and Abroad,” 86 Fed. Reg. 7619 (Feb. 1, 2021). In these comments, we generally refer to underserved or disadvantaged communities as “EJ communities.”

<sup>3</sup> World Nuclear News, “USA needs nuclear to achieve net zero, says Granholm” (June 17, 2021), <https://world-nuclear-news.org/Articles/USA-needs-nuclear-to-achieve-net-zero-says-Granholm>.

<sup>4</sup> International Energy Agency, *Nuclear Power in a Clean Energy System* (May 2019), <https://www.iea.org/reports/nuclear-power-in-a-clean-energy-system>; U.S. Energy Information Administration, “Electric Power Monthly ES1.B” <https://www.eia.gov/electricity/monthly/>.

<sup>5</sup> See International Atomic Energy Agency, *Nuclear Power and Sustainable Development*, at 50-51 (2016), <http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1754web-26894285.pdf>. Life-cycle assessments consider impacts related to operation, and the generation source’s “construction and decommissioning as well as the fuel cycle”—*i.e.*, from “cradle to grave.” See *id.* at 5, 38.

<sup>6</sup> After the NRC first committed to endeavor to meet EJ objectives in 1994, it issued an EJ Strategy document in 1995, and reactor and materials-specific guidance documents in 1997. It has updated or supplemented those guidance documents numerous times over the years, including, for example, in 2003, 2004, 2014, 2018, and 2020.

under the National Environmental Policy Act (NEPA). As such, the NRC already has a solid framework in place for identifying and addressing EJ issues. That notwithstanding, we support the NRC's initiative to review and augment, as necessary, its treatment of EJ issues within the context of its discrete statutory mission and authorities. While the agency's framework is generally sound, and it has long sought to engage with local communities as part of NRC licensing actions, there are enhancements NRC can make to its EJ review processes to improve its implementation of its 2004 Policy Statement on environmental justice<sup>7</sup> and regulatory guidance. Specifically, the NRC should consider taking additional actions to:

- ensure that the agency uses the most relevant and up-to-date EJ-related data and tools in identifying EJ communities and potentially disproportionate environmental impacts to those communities;
- assess the agency's implementation of its EJ review methodologies and procedures, especially as they relate to identifying and engaging EJ communities through appropriate public outreach, engagement, and participation opportunities;
- ensure public accessibility both to the NRC's web-based electronic documents and resources by significantly improving the ADAMS system to make it user-friendly, and to live meetings by involving communities in which broadband may not be available or widely used;
- examine other regulatory agencies' EJ procedures and methodologies to identify best practices and assess their potential use in NRC EJ analyses;
- optimize NRC participation in EJ-related interagency activities;
- clarify the relationship between the NRC's Tribal Policy Statement and Tribal Protocol Manual and its EJ Policy Statement and related guidance;
- include in EJ reviews appropriate discussion of climate change impacts as well as nuclear energy's benefits as a non-emitting source that avoids certain disparate impacts on EJ communities;
- clarify the limits of NRC authority to require specific mitigation measures; and
- clarify when the NRC must perform an EJ review for a proposed action for which it prepares an environmental assessment (EA) rather than an environmental impact statement (EIS).

Nuclear energy's clean-air generation, reliability, and economic benefits can help facilitate a socially and environmentally just transition to a decarbonized electric grid.<sup>8</sup> Advancing environmental justice requires efforts beyond the NRC's process. To that end, NEI has undertaken an EJ initiative, which has led to the articulation of the following principles emphasizing the importance of the industry: (1) actively engaging with disadvantaged communities to enhance mutual trust and understanding; (2) integrating EJ considerations into business and operational practices; (3) supporting efforts that help local, disadvantaged communities share in the benefits from industry operations and activities; and (4)

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<sup>7</sup> Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040 (Aug. 24, 2004) (EJ Policy Statement).

<sup>8</sup> See, e.g., NEI, *Nuclear by the Numbers* (Aug. 2020), <https://www.nei.org/resources/fact-sheets/nuclear-by-the-numbers>; NEI, *Decarbonizing Our Economy: Nuclear Energy Climate Policy Priorities* (Apr. 2021), <https://www.nei.org/resources/fact-sheets/decarbonizing-economy-nuclear-energy-policy>.

supporting public policies based on mutual respect and justice.<sup>9</sup> For many decades NEI members have taken—and continue to take— various actions to address and incorporate the needs of EJ communities into their operations, including:

- making explicit commitments to advancing EJ in corporate policies and sustainability reports, with a focus on engaging stakeholders during planning, development, and operations;
- hiring EJ program managers and EJ consultants;
- creating company positions specifically responsible for engaging in, facilitating, or overseeing community outreach, including outreach to Tribal and indigenous communities;
- dedicating board-level governance and/or managerial staff to overseeing the company’s environmental, social, and governance (ESG) efforts as well as diversity, equity and inclusion (DEI), and/or corporate social responsibility programs;
- establishing a board-level sustainability and corporate responsibility committee to oversee EJ matters;
- using varied approaches to public engagement, including formalized mechanisms (e.g., stakeholder events and forums, community advisory and engagement panels) to reach out to local communities;
- undertaking project-specific public engagement, including outreach to local communities when closing or decommissioning a facility;
- engaging stakeholders on company-wide initiatives and strategies, including those related to climate change adaptation and resiliency investments, transitioning to a low- or zero-carbon economy, sustainability, infrastructure improvement, and energy efficiency;
- educating employees on environmental and EJ-specific policies;
- implementing environmental management systems (EMS) to capture and track company compliance with applicable environmental regulations and laws;
- partnering with local organizations to provide training, or offer workforce development programs, professional training, and education for interested community members;
- supporting non-profit organizations via financial and/or in-kind donations, including organizations that promote racial equity, workforce development, economic development, environmental conservation and protection, and access to affordable energy; and
- establishing dedicated supplier diversity programs.

Thus, our members are taking actions to advance environmental justice, independent of any obligations that might stem from their status as NRC licensees.

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<sup>9</sup> See NEI, “Environmental Justice Principles,” <https://www.nei.org/resources/environmental-justice-principles>.

## II. Environmental Justice at the NRC

Environmental justice is commonly defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with regard to the development, implementation, and enforcement of environmental laws, regulations, and policies.<sup>10</sup> Historically, the application of EJ concepts at the NRC—including its direct link to NEPA—can best be understood in relation to President Clinton’s 1994 Executive Order (E.O.) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,”<sup>11</sup> which has been described as “a foundational document for environmental justice policies.”<sup>12</sup> E.O. 12898 directed each federal agency, to the greatest extent practicable and permitted by law, to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, *disproportionately high and adverse human health or environmental effects* of programs, policies, and activities” on minority and low-income communities.<sup>13</sup>

Although independent regulatory agencies such as the NRC were only encouraged, rather than directed, to comply with E.O. 12898, the NRC committed in March 1994 to endeavor to implement the measures set forth in E.O. 12898 as part of the agency’s NEPA review process.<sup>14</sup> This approach makes legal and logical sense, as NEPA mandates environmentally-informed decision-making by federal agencies, applies to a broad range of regulatory and licensing actions, and allows for evaluation of a proposed action’s environmental impacts and related socioeconomic effects as well as alternatives for mitigating impacts or effects that may be adverse in nature. Furthermore, the NEPA scoping process provides *early notice* to individuals and communities potentially affected by a proposed federal action, as well as *early and ample opportunities to participate in the development of the agency’s EIS*.<sup>15</sup>

Following issuance of the Clinton E.O., the NRC took immediate steps to integrate EJ considerations into the agency NEPA’s process, as documented in the 1995 “Environmental Justice Strategy” sent by the NRC to the Chair of the EJ Interagency Working Group.<sup>16</sup> With the publication of the Council on Environmental Quality’s (CEQ) December 1997 guidance on how to incorporate EJ in

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<sup>10</sup> Environmental Protection Agency (EPA), “Environmental Justice”, <https://www.epa.gov/environmentaljustice>.

<sup>11</sup> 59 Fed. Reg. 7629 (Feb. 16, 1994).

<sup>12</sup> Congressional Research Service (CRS) Legal Sidebar LSB10590, “Addressing Environmental Justice Through NEPA” (Apr. 20, 2021) (CRS EJ-NEPA Report), <https://www.everycrsreport.com/reports/LSB10590.html>.

<sup>13</sup> 59 Fed. Reg. at 7629 (emphasis added).

<sup>14</sup> See Letter from Ivan Selin, NRC Chairman, to President William Clinton (Mar. 31, 1994) (ML033210526). The Presidential Memorandum that accompanied E.O. 12898 states that “each Federal agency shall analyze the environmental effects, including human health, economic, and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA.” White House Memorandum for the Heads of All Departments and Agencies, “Subject: Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (Feb. 11, 1994).

<sup>15</sup> See, e.g., *Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1116 (9th Cir. 2002) (“The primary purpose of the scoping period is to notify those who may be affected by a proposed government action which is governed by NEPA that the relevant entity is beginning the EIS process; this notice requirement ensures that interested parties are aware of and therefore are able to participate meaningfully in the entire EIS process, from start to finish.”).

<sup>16</sup> Memorandum from H. Thompson, Jr., NRC to C. Browner, EPA (Mar. 24, 1995) (enclosing NRC’s “Environmental Justice Strategy”) (ML20081K602).

the NEPA process,<sup>17</sup> the NRC developed EJ guidance for reactor and materials licensing proceedings based on the CEQ guidelines. In the ensuing five years, the NRC proceeded to integrate environmental justice into agency research, rulemaking, licensing, and adjudicatory activities.<sup>18</sup>

Drawing from the previous ten years' experience, in 2004 the Commission issued the EJ Policy Statement. It sets forth the Commission's views and policy on the significance of E.O. 12898 and guidelines on when and how EJ will be considered in NRC licensing and regulatory actions. As a threshold matter, the Commission explained that "[t]he legal basis for the NRC analyzing environmental impacts of a proposed Federal action on minority or low-income communities is NEPA, not Executive Order 12898."<sup>19</sup> It noted that EJ is a tool—to be used as part of the NRC's NEPA review process—to identify communities that might otherwise be overlooked, and to identify impacts resulting from their unique demographic, economic, or other circumstances.<sup>20</sup> The Commission reiterated that NRC EJ reviews should focus on identifying, weighing, and considering ways to avoid or mitigate disproportionately significant and adverse environmental impacts on minority and low-income communities that may result from unique attributes of those communities.<sup>21</sup>

In the EJ Policy Statement, the Commission emphasized that its statutory responsibilities under the Atomic Energy Act of 1954, as amended (AEA) center on protecting radiological health and safety and the common defense and security.<sup>22</sup> Nevertheless, it reaffirmed its "commitment to pursue and address environmental justice policy goals through the NEPA process."<sup>23</sup> It explained, however, that the scope of its EJ reviews is necessarily coincident with the purpose and scope of NEPA, a procedural statute that "mandates a hard look at the significant *environmental* impacts of a proposed major Federal action," including potentially disparate environmental impacts to minority and low-income communities.<sup>24</sup>

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<sup>17</sup> CEQ, *Environmental Justice Guidance Under the National Environmental Policy Act* (Dec. 1997) (1997 CEQ Guidance), [https://www.epa.gov/sites/default/files/2015-02/documents/ej\\_guidance\\_nepa\\_ceq1297.pdf](https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf).

<sup>18</sup> Key examples include the Watts Bar Units 1 and 2 operating license, Louisiana Energy Services (Claiborne Enrichment Center), Hydro Resources (Rio Rancho ISL), and Private Fuel Storage (ISFSI) licensing proceedings.

<sup>19</sup> EJ Policy Statement, 69 Fed. Reg. at 52,048.

<sup>20</sup> *Id.* at 52,047.

<sup>21</sup> *Id.* at 52,041-42, 51,047 (citing *Private Fuel Storage* (Indep. Spent Fuel Storage Installation), CLI-02-20, 56 NRC 156 (2002)).

<sup>22</sup> *Id.* at 52,044. As a practical matter, "[t]o protect public health and safety, NRC regulations are focused on reducing the likelihood of a radiological release," and "[i]n this way, the NRC's regulatory philosophy has been based on the premise that protection of public health and safety also affords protection for the environment." SECY-12-0110, "Consideration of Economic Consequences within the U.S. Nuclear Regulatory Commission's Regulatory Framework," at 3-4, 6 (Aug. 14, 2012) (ML12173A479). However, "[t]he AEA and NEPA contemplate *separate* NRC reviews of proposed licensing actions." *Fla. Power & Light Co.* (Turkey Point Nuclear Power Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 13 (2001) (emphasis in original).

<sup>23</sup> EJ Policy Statement, 69 Fed. Reg. at 52,041-42.

<sup>24</sup> *Id.* at 52,044 (emphasis added). In this regard, the Commission clarified that issues involving alleged racial discrimination "go[] beyond the scope of NEPA's mandate to adequately identify and weigh significant adverse environmental impacts." *Id.* at 52,045.

### **III. Adequacy of the 2004 EJ Policy Statement and NRC's NEPA-Based Approach to Environmental Justice Reviews**

In its April 23, 2021 Staff Requirements Memorandum (SRM), the Commission directed the NRC staff to review the adequacy of the 2004 EJ Policy Statement, including evaluating whether the NRC should expand consideration of EJ beyond agency NEPA reviews. As explained below, the Policy Statement, while perhaps benefitting from some clarification, provides appropriate guidelines for analyzing EJ issues in NRC regulatory and licensing actions “within the bounds of already existing law,” i.e., NEPA.<sup>25</sup>

Although the EJ Policy Statement indicates that “E.O. 12898 does not establish new substantive or procedural requirements applicable to NRC regulatory or licensing activities” given the NRC’s status as an independent regulatory agency, it nonetheless reflects the NRC’s longstanding commitment to consider EJ issues in its regulatory and licensing actions.<sup>26</sup> It explicitly notes that “[t]he Commission is committed to the general goals set forth in E.O. 12898.”<sup>27</sup> Like the Clinton E.O., the new Biden administration E.O.s 13990 and 14008 are not binding on the NRC as an independent regulatory agency and do not confer any new authority upon the Commission that would mandate or justify the agency’s consideration of EJ issues outside of “the normal and standard NEPA process in NRC regulatory and licensing actions.”<sup>28</sup>

The EJ Policy Statement reflects the NRC’s practice of addressing EJ considerations in its licensing and regulatory actions as part of its NEPA review process.<sup>29</sup> NEI continues to view NEPA as the proper statutory vehicle for considering EJ issues in NRC proceedings. As the Commission explained in the Policy Statement: “The AEA does not give the Commission the authority to consider EJ-related issues in NRC licensing and regulatory proceedings. Apart from the mandate set forth in NEPA, the Commission is limited to the consideration of radiological health and safety and common defense and security.”<sup>30</sup> The U.S. Supreme Court similarly has observed that the NRC’s “prime area of concern in the licensing context ... is national security, public health, and safety.”<sup>31</sup>

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<sup>25</sup> *Id.* at 52,045

<sup>26</sup> *Id.* at 52,046.

<sup>27</sup> *Id.* at 52,042.

<sup>28</sup> *Id.*

<sup>29</sup> *See id.* at 52,047 (noting that NEPA is “[t]he only ‘existing law’ conceivably pertinent here,” and that “EJ is a tool, within the normal NEPA context, to identify communities that might otherwise be overlooked and identify impacts due to their uniqueness as part of the NRC’s NEPA review process”); *id.* at 52,040 (“NRC believes that an analysis of disproportionately high and adverse impacts needs to be done as part of the agency’s NEPA obligations to accurately identify and disclose all significant environmental impacts associated with a proposed action.”).

<sup>30</sup> *Id.* at 52,044. *See also Quivira Mining Company*, CLI-98-11, 48 NRC 1, 14 (1998) (“The AEA concentrates on the licensing and regulation of nuclear materials for the purpose of protecting public health and safety and the common defense and security.”). Insofar as the NRC’s safety regulations also encompass environmental protection requirements (e.g., radiological effluent discharge limits and monitoring requirements in Part 50), those requirements are directly linked to the Commission’s AEA authority to license and regulate certain nuclear materials and facilities on the basis of radiological health and safety and the common defense and security.

<sup>31</sup> *Pac. Gas & Electric Co. v. State Energy Res. Conserv. & Dev. Comm'n*, 461 U.S. 190, 207 (1983) (quoting *Vt. Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 550 (1978)).

The use of the NEPA process is logical. The goals of environmental justice are generally consistent with the key goals of NEPA, including the Federal Government’s duty to use all practicable means to create and maintain conditions under which humans and nature can exist in “productive harmony.”<sup>32</sup> NEPA also seeks to “improve and coordinate Federal plans, functions, programs, and resources” to, among other things, “assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings,” and “preserve important historic, cultural, and natural aspects of our natural heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice.”<sup>33</sup> The fair and equitable treatment of all persons is implicit in these NEPA goals.

It also makes practical sense. The NEPA process, as implemented through CEQ regulations, provides for *early and extensive public participation*—*i.e.*, meaningful involvement of all people. Section 1506.6 of CEQ regulations directs agencies to facilitate public involvement, including notifying the public of agency actions, holding public hearings, and providing notice of NEPA-related hearings, public meetings, and other opportunities for public involvement, as well as the availability of environmental documents.<sup>34</sup> Section 1501.9 requires agencies to issue a public scoping notice regarding proposed actions for which they are preparing EISs and solicit information from the public regarding such actions.<sup>35</sup> Section 1503.1 directs agencies to seek public comments on the draft EIS.<sup>36</sup> NRC’s NEPA regulations in 10 CFR Part 51 also emphasize public participation.

Furthermore, as reflected in the EJ Policy Statement, NRC regulations provide an additional opportunity for public participation that exceeds NEPA’s requirements. The NRC’s adjudicatory rules allow petitioners to submit proposed contentions based on NEPA to challenge the agency’s compliance with the mandates of the statute.<sup>37</sup> Such hearing opportunities go well beyond the practices of other agencies. Under these rules, EJ-related NEPA contentions have been adjudicated in numerous prior NRC proceedings. As the Policy Statement further explains, however, EJ contentions, like all other proposed contentions, must satisfy the NRC’s admissibility standards in 10 CFR 2.309.<sup>38</sup> Those standards have evolved over many decades of adjudicatory practice and reflect the NRC’s “long-standing commitment to the expeditious completion of adjudicatory proceedings while still ensuring that hearings are fair and produce an adequate record for decision.”<sup>39</sup>

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<sup>32</sup> 42 U.S.C. § 4331(a).

<sup>33</sup> 42 U.S.C. § 4331(b).

<sup>34</sup> 40 CFR 1506.6 (“Public Involvement”).

<sup>35</sup> 40 CFR 1501.9 (“Scoping”).

<sup>36</sup> 40 CFR 1503.1 (“Inviting Comments and Requesting Information and Analyses”).

<sup>37</sup> See EJ Policy Statement, 69 Fed. Reg. at 52,044 (“In the context of EJ-related matters, the only possible basis for an admissible contention is NEPA, which statutorily mandates a hard look at the significant environmental impacts of a proposed major Federal action.”).

<sup>38</sup> *Id.* at 52,048.

<sup>39</sup> *Statement of Policy on the Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 24 (1998).

As the foregoing discussion makes clear, the scope of the NRC’s EJ reviews—and of any EJ contention admitted for hearing—must be consistent with the scope of NEPA. As such, in its EJ Policy Statement, the Commission concluded that that “NEPA is not the appropriate context in which to assess racial motivation and fairness or equity issues.”<sup>40</sup> It further underscored that agencies are required to look at socioeconomic impacts only insofar as they “have a nexus to the physical environment.”<sup>41</sup>

The NRC’s statutory duties and authorities flow from the AEA, in which “Congress granted [the NRC] authority merely to regulate radiological and related environmental concerns.”<sup>42</sup> Congress did not give the NRC a “roving mandate” to examine and adjudicate “issues that are the primary responsibility of other agencies and whose resolution is not necessary to meet [the NRC’s] statutory responsibilities.”<sup>43</sup> NEPA does not alter this conclusion because it does not expand the NRC’s statutory mandate or authorities. It requires the NRC to analyze those potential impacts that have a reasonably close causal connection to changes to the physical environment resulting from the proposed action.<sup>44</sup> Thus, NEPA is a not proxy for civil rights, employment, and other laws designed to redress social and economic inequalities.<sup>45</sup> As discussed in the EJ Policy Statement, the Commission has applied these principles in prior licensing adjudications, including the *Louisiana Energy Services* (LES) and *Private Fuel Storage* (PFS) proceedings. In *LES*, the Commission affirmed its commitment to the EJ goals set out in E.O. 12898, but held that “NEPA is not a civil rights law calling for full-scale racial discrimination litigation in NRC licensing proceedings.”<sup>46</sup> In the *PFS* proceeding, the Commission held that NEPA does not “call for an investigation into disparate economic benefits as a matter of environmental justice” because nothing in E.O. 12898 or NEPA “suggest[s] that a failure to receive an economic benefit should be considered tantamount to a disproportionate impact.”<sup>47</sup> It concluded that “NEPA simply is not the vehicle, and NRC not the forum,” for resolving discriminatory economic policies.<sup>48</sup> Nothing in the President’s Biden’s newer E.O.s alters these well-settled and reasonable legal conclusions.

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<sup>40</sup> EJ Policy Statement, 69 Fed. Reg. at 52,045.

<sup>41</sup> *Id.* at 52,047.

<sup>42</sup> *Hydro Res., Inc.* (Albuquerque, NM), CLI-98-16, 48 NRC 119, 121 (1998).

<sup>43</sup> *Id.* at 121-22.

<sup>44</sup> *See Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 772, 773 (1983) (noting that NEPA does not require an agency to assess every impact on a project, but only those that have a “reasonably close causal relationship” with “a change in the physical environment”); *Pa’ina Hawaii, LLC* (Materials License Application), CLI-08-16, 68 NRC 221, 228 (2008).

<sup>45</sup> *Cf. Ky. Coal Ass’n, Inc. v. Tenn. Valley Auth.*, 804 F.3d 799, 806 (6th Cir. 2015) (“The National Environmental Policy Act is not a national employment act, and its [e]nvironmental goals and policies were never intended to reach social problems such as those presented here.”) (internal quotation marks and citation omitted).

<sup>46</sup> *La. Energy Servs.* (Claiborne Enrichment Ctr.), CLI-98-3, 47 NRC 77, 106 (1998). As the Commission noted, under a variety of state and national civil rights laws, local communities can (and frequently do) bring court actions challenging land use decisions alleged to be racially discriminatory. *Id.* at 103 n.4 (citations omitted).

<sup>47</sup> *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 154 (2002).

<sup>48</sup> *Id.* at 159.



#### **IV. Identification of EJ Communities**

##### **A. Overview of the NRC's Current Procedures and Practices**

The NRC seeks input on how it could enhance its identification of EJ communities during the NEPA review process. NEI believes the NRC's EJ Policy Statement and regulatory guidance contain generally sound guidelines for identifying and accounting for EJ communities.<sup>49</sup> The Policy Statement itself includes some procedural guidelines for implementing an EJ review through identification of minority and low-income communities and assessing the environmental impacts they may experience. That is, the Commission specified the components of an EJ review, including defining the geographic area for assessment, identifying low-income and minority communities, and conducting thorough scoping.<sup>50</sup>

The EJ Policy Statement also endorsed the Staff's use of certain numerical guidelines as a useful EJ screening tool, to be augmented through the NEPA scoping process and other public outreach methods.<sup>51</sup> As the Policy Statement notes, NRC guidance calls for the use of publicly-available U.S. Census Bureau block group data.<sup>52</sup> "The NRC uses the census 'block group' as the geographic area for evaluating census data because the U.S. Census Bureau does not report information on income for 'blocks', the smaller geographic area."<sup>53</sup> The Policy Statement further explains that census data analysis "will be supplemented by the results of the EIS scoping review to obtain additional information."<sup>54</sup>

NRC guidance details the process by which the staff identifies EJ populations near an existing or proposed NRC-licensed facility. Appendix D to NRR Office Instruction LIC-203, for example, describes in detail the key steps in the EJ analysis for reactor licensing actions.<sup>55</sup> Briefly described, the NRC first examines the geographic distribution of minority and low-income populations (as defined in NRC guidance) within a 50-mile radius of the reactor site of interest by examining each census block group that is fully or partially included within the region. The census block group is considered a potentially-affected EJ population if either of two criteria are met: (1) the potentially-affected EJ

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<sup>49</sup> As discussed below, the NRC developed its current guidance based largely on CEQ guidelines that also provide the foundation for other agencies' procedures (including EPA's) for identifying EJ communities.

<sup>50</sup> The D.C. Circuit's recent decision in *Vecinos para el Bienestar de la Comunidad Costera, et al. v. FERC*, No. 20-1045 (D.C. Cir. Aug. 23, 2021) underscores the importance of properly delineating the area potentially affected by a project and the EJ communities within that area at the outset of an agency's NEPA review. In that case, the court held that the Federal Energy Regulatory Commission (FERC) acted arbitrarily by not explaining why it analyzed the impacts only on communities in census block groups within two miles of the project when the agency's analysis showed that environmental impacts could occur up to 31 miles away. The court accordingly remanded the case to FERC.

<sup>51</sup> See EJ Policy Statement, 69 Fed. Reg. at 52,046-48.

<sup>52</sup> *Id.* at 52,046.

<sup>53</sup> *Id.* The U.S. Census Bureau organizes its data in a geographic hierarchy wherein blocks are the smallest geographical unit. Several blocks are combined to make a block group, several block groups are combined to make up a tract, and several tracts are combined to make up a county. The census block group provides race, ethnicity, and income information that is not collected for the smaller census block.

<sup>54</sup> *Id.*

<sup>55</sup> NRR Office Instruction, LIC-203, Rev. 4, "Procedural Guidance for Categorical Exclusions, Environmental Assessments, and Considering Environmental Issues" (July 7, 2020) (LIC-203) (ML20016A379).

population exceeds 50 percent of the total population for the block group, or (2) the percentage of the potentially affected EJ population within the block group is 20 percentage points (or more) greater than the same population's percentage in the block group's state.<sup>56</sup>

The NRC investigates EJ populations more closely to determine if there are environmental impacts that may disproportionately affect such communities due to their unique attributes.<sup>57</sup> Thus, the NRC's EJ methodology includes an assessment of pockets of populations that have unique characteristics that may not be discerned by census data, but might receive a disproportionately high and adverse impact from constructing and/or operating a proposed facility.<sup>58</sup> Unique characteristics may include, for example, the presence of densely-populated low-income housing projects, reliance on pedestrian travel, sensitivity to noise or aesthetic disturbances, proximity to the facility, reliance on subsistence activities (e.g., gardening, fishing, hunting), other distinct cultural practices (e.g., Native American religious and ceremonial reliance on natural resources), and the presence of migrant populations.<sup>59</sup>

NRC guidance further calls for the use of "public outreach and field investigations in the demographic region to determine whether the [census block group] analysis did not capture any potentially affected EJ populations."<sup>60</sup> For example, the existence of specific subsistence and related resource dependencies attributable to any site are most commonly documented by direct observation and interviews with local EJ community leaders.<sup>61</sup> Identifying the unique characteristics of potentially-affected EJ communities also involves conducting interviews and community visits.<sup>62</sup>

Although the NRC has a longstanding and well-developed EJ review framework, we recognize that concerns have been voiced about the efficacy of the agency's implementation of that framework. Thus, we focus our recommendations below on specific ways the NRC can improve implementation of the process by which it identifies EJ populations near an existing or proposed NRC-licensed facility.

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<sup>56</sup> *Id.* at D-6. As NRC guidance explains, all block groups with minority and/or low-income percentages higher than the geographic area should be identified on 50-mile radius maps. It is possible that the geographic area could cross county and state lines and this should be considered when making comparisons. That is, if the impact area overlaps more than one government jurisdiction (state, county, etc.), then the NRC staff should define the geographic area to encompass parts of each government jurisdiction; such a defined geographic area does not need to stop at established boundaries such as county or state lines. LIC-203, App. D at D-4, D-6.

<sup>57</sup> *Id.* at D-8. For operating facilities (e.g., nuclear power plants seeking initial or subsequent license renewal), this investigation includes, among other things, reviewing relevant radiological effluent monitoring and radiological environmental monitoring data. All NRC reactor licensees are required to have radiological environmental monitoring programs (REMP), which assess the effects of site operations on the environment that could affect special pathway receptors. NRC-licensed fuel cycle facilities also are required to have similar radiological effluent and environmental monitoring programs. *Id.*

<sup>58</sup> *Id.* at D-6 to D-7. *See also* NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs", App. C at C-5 (Aug. 22, 2003) (NUREG-1748) (ML032450279).

<sup>59</sup> LIC-203, App. D at D-8; Regulatory Guide 4.2, Revision 3, "Preparation of Environmental Reports for Nuclear Power Stations," at 48, 99-100 (Sept. 2018) (ML18071A400) (Reg. Guide 4.2).

<sup>60</sup> Reg. Guide 4.2 at 46.

<sup>61</sup> *Id.* at 48.

<sup>62</sup> *Id.*

## B. NEI Recommendations

The NRC should ensure that it is using the most appropriate and up-to-date data and analysis tools, consistent with NEPA's requirement that the NRC "conduct [its] environmental review with the best information available today."<sup>63</sup> One noteworthy source of new data is the U.S. Census Bureau's recently-completed 2020 Census. As discussed above, census data are a necessary and core component of EJ analyses. Indeed, NRC reactor-related guidance states that "[t]he first step [in an EJ analysis] is to obtain the most recent decennial (10-year) demographic (Census) data for the 50-mile radius and surrounding communities," and that "[t]he [NRC] reviewer should also use the best available State information."<sup>64</sup> The Census Bureau released the 2020 census results and various related tools (e.g., visualizations, statistics) in August 2021, and continues to develop additional tools to facilitate understanding and use of the new data, including for purposes of identifying underserved communities.<sup>65</sup> The NRC's use of these newly-available data and tools will serve to enhance the quality of its EJ reviews.

NEI recommends that the NRC continue to use current census-based demographic data as the foundation of its process for identifying potential EJ communities or populations, as this approach allows for consideration of very granular demographic (i.e., census block group) data over very large geographic areas (e.g., 50-mile radius areas for reactors) that may span multiple states. However, we recognize that the state-of-the-art in EJ mapping is rapidly evolving.<sup>66</sup> Indeed, many states have enacted EJ legislation, and some of those states have developed state-specific data collection, mapping, and screening tools for identifying and assessing EJ communities or populations that are based in part on EPA's EJSCREEN.<sup>67</sup> For example, some states identify communities experiencing cumulative impacts from multiple pollutants using multiple indicator data sets (e.g., environmental effects, sensitive populations, and socioeconomic factors).<sup>68</sup> Although these state-specific tools should not supplant the NRC's current screening methodology, the NRC should consider whether such tools (when relevant to a particular licensing or regulatory action) might offer additional data or insights that could be used to

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<sup>63</sup> *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), CLI-12-7, 75 NRC 379, 391-92 (2012) (citations omitted).

<sup>64</sup> LIC-203, App. D at D-5.

<sup>65</sup> Data are available in the [2020 Census Demographic Data Map Application](#) through [different data visualizations](#) and [QuickFacts](#). Data files are also available on the [Decennial Census P.L. 94-171 Redistricting Data Summary Files](#) page and includes the geographic support files, technical documentation and additional support materials needed to access these data.

<sup>66</sup> See Konisky, D. Gonzalez & K. Leatherman, "Mapping for Environmental Justice: An Analysis of State Level Tools" (July 2021), Environmental Resilience Institute and O'Neill School of Public and Environmental Affairs, Indiana University, <https://eri.iu.edu/research/environmental-justice-mapping-tools.html>; Lee, C., "A Game Changer in the Making? Lessons From States Advancing Environmental Justice Through Mapping and Cumulative Impact Strategies" (Mar. 2020), Environmental Law Institute, *Environmental Law Reporter* 50:10203, available at <https://www.eli.org/sites/default/files/docs/50.10203.pdf>.

<sup>67</sup> EJSCREEN an EJ mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. See EPA, "EJSCREEN: Environmental Justice Screening and Mapping Tool," <https://www.epa.gov/ejscreen>. NRC guidance cites EJSCREEN as a potential source of "additional insight into the EJ process." Reg. Guide 4.2, Rev. 3 at 46.

<sup>68</sup> See, e.g., California Office of Environmental Health Hazard Assessment, "CalEnviroScreen," <https://oehha.ca.gov/calenviroscreen>.

augment or complement the NRC's current process for identifying EJ communities and particular vulnerabilities within those communities.<sup>69</sup>

We also recommend that the NRC review the efficacy of its screening-related public outreach and field investigation methods. As noted above, NRC guidance directs that quantitative demographic analyses be supplemented by field reconnaissance or investigations to ensure the identification of potentially-affected EJ populations that may not be captured by census or other demographic data. That guidance, however, is high-level in nature, referring generally to "direct observation", interviews with "community leaders", and "community visits."<sup>70</sup> Given the importance of such outreach activities, the NRC should consider developing more detailed and formal protocols for conducting field observations, interviews, and site visits to ensure the agency is interacting with elected officials, community leaders and other representatives of EJ and Tribal communities.<sup>71</sup> Such protocols could be included in future updates to NRC guidance documents like LIC-203, NUREG-1555, Reg. Guide 4.2, and NUREG-1748.

## **V. NRC's Public Outreach, Engagement, and Participation Processes**

A recurring theme in the NRC's Request for Comment is how the NRC engages with, and gathers input from, stakeholders and interested persons on the environmental impacts of proposed agency actions, including potentially disproportionate impacts on EJ communities. The NRC is right to focus on this issue. E.O.s 13990 and 14008 underscore the importance of obtaining input from the public and stakeholders, including state, local, and Tribal officials, scientists, labor unions, environmental advocates, and EJ organizations to assess the potential impacts of a proposed project on identified EJ communities.

### **A. Overview of the NRC's Current Procedures and Practices**

The objectives of stakeholder and community outreach, engagement, and participation have been integral to the NRC's EJ framework since its inception. The 1995 EJ Strategy notes that "[t]he NRC maintains regular communication with a broad spectrum of entities, such as the States, Indian Tribes, members of the public and other Federal agencies," and that "NRC management is committed to improving [its] outreach efforts with stakeholders, including minority and low-income communities, and welcoming their input."<sup>72</sup> Again, continual implementation of this commitment is crucial.

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<sup>69</sup> Relevant to this point, current NRC guidance directs the staff to "consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected minority and/or low-income populations and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available." LIC-203, App. D at D-3.

<sup>70</sup> Reg. Guide 4.2 at 48.

<sup>71</sup> Attachment 2 to COL/ESP-ISG-026, "Environmental Issues Associated with New Reactors Interim Staff Guidance" (Aug. 2014) contains some additional details regarding community interviews or the "on-site verification" process. Specifically, it notes that local community leaders may include mayors, county or city administrators, fire and police chiefs, utility managers, road management administrators, county or city planners, school boards and/or administrators, Chambers of Commerce, and Economic Development organizations. It further states that local community organizations may include churches and philanthropic organizations as well as minority- and ethnicity-based service or advocacy organizations.

<sup>72</sup> 1995 EJ Strategy at 2.

As noted above, using CEQ's 1997 guidelines as a model, the NRC's Offices of Nuclear Material Safety and Safeguards (NMSS) and Nuclear Reactor Regulation (NRR) each developed EJ guidance (NUREG-1748 and LIC-203, respectively) that the Commission endorsed in its 2004 Policy Statement.<sup>73</sup> Both guidance documents provide for extensive public participation in the EIS scoping process (*i.e.*, interviews, public comment, local meetings, and outreach efforts) to allow for identification of EJ concerns and opportunities to address those concerns early in the NRC's environmental review process.<sup>74</sup> In fact, the EJ Policy Statement notes that the scoping process described in 10 CFR 51.29 and public comments on the draft EIS are "a fundamental part of the NEPA process" and "consistent with the E.O. and CEQ guidelines."<sup>75</sup> Quoting the CEQ's 1997 guidance, the EJ Policy Statement further notes:

[T]he participation of diverse groups in the scoping process is necessary for full consideration of the potential environmental impacts of a proposed agency action and any alternatives. By discussing and informing the public of the emerging issues related to the proposed action, agencies may reduce misunderstandings, build cooperative working relationships, educate the public and decisionmakers, and avoid potential conflicts.<sup>76</sup>

NRR Office Instruction LIC-203 provides more detailed and prescriptive guidance to ensure adequate outreach, engagement, and participation opportunities for EJ communities during NRC NEPA reviews. Consistent with CEQ's 1997 EJ Guidance, LIC-203 directs the NRC staff to:

- develop an effective public participation strategy to include minority and/or low-income individuals and communities in the NEPA process;
- acknowledge and seek to overcome linguistic, cultural, and other barriers to meaningful participation and incorporate active outreach to affected minority and/or low-income communities;
- strive to include minority and/or low-income community representation in the NEPA process;
- be aware of the diverse constituencies within any community and endeavor to have complete representation of the community as a whole;
- recognize that community participation must occur as early as possible to be meaningful; and
- seek Tribal representation in the NEPA process in a manner that is consistent with government-to-government relations.<sup>77</sup>

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<sup>73</sup> See NUREG-1748 and LIC-203. The CEQ's 1997 EJ Guidance was designed to assist agencies in identifying and addressing EJ issues through NEPA's procedures. That guidance, while recognizing that "[t]here is not a standard formula for how environmental justice issues should be identified or addressed," identified six guiding principles. 1997 CEQ EJ Guidance at 8-9.

<sup>74</sup> EJ Policy Statement, 69 Fed. Reg. at 52,043.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.* at 52,048 (quoting 1997 CEQ EJ Guidance at 12).

<sup>77</sup> LIC-203, App. D at D-3.

LIC-203 directs the NRC staff to conduct outreach through minority business and trade organizations, schools, colleges, labor organizations, or other appropriate organizations; advertise public meetings through locally-targeted media, mailings, and the internet and by posting flyers in local shopping centers, government facilities, and other public places. It further instructs the NRC staff to consider “innovative” approaches to overcoming linguistic, institutional, cultural, economic, historical, or other potential barriers to effective participation in the decision-making process.<sup>78</sup> NMSS guidance in NUREG-1748 provides similar recommendations aimed at “ensur[ing] that minority and low-income populations are given the opportunity to participate.”<sup>79</sup>

As with the NRC’s guidelines for identifying EJ communities, the efficacy of the agency’s community outreach, engagement, and participation procedures hinges on how diligently and consistently the NRC implements those procedures in practice. We provide some suggestions for improved implementation below.

## **B. NEI Recommendations**

The NRC guidance described above should go a long way to ensuring meaningful involvement of disadvantaged or underserved communities. However, as implementation concerns were mentioned numerous times at the agency’s public meetings, the NRC should confirm that it is rigorously and consistently implementing the methods and practices outlined in that guidance as it performs NEPA reviews of NRC licensing and regulatory actions. The NRC, in short, should strive to optimize both *accessibility* and *delivery and receipt of information*. There are multiple ways by which the agency may do so in the context of public education, outreach and engagement.

### 1. Improve the Accessibility, Delivery and Receipt of Information

The NRC considers public involvement in, and information about, its activities to be a cornerstone of effective and transparent regulation. Thus, the NRC should make information on its policies and processes as well as the nuclear technologies and activities it regulates readily accessible to the public. This information also should be in a form that is easily understood by the public.

NRC also should make underlying information about a proposed or existing project or facility easily accessible, particularly in advance of public meetings, in an easy-to-access place and format. In seeking to educate the public about particular projects and NRC licensing processes more broadly, the NRC should seek to maximize access to and use of the agency’s various educational resources. A good starting point would be improving or replacing the Web-based ADAMS user interface. The ADAMS search function simply is not user-friendly or intuitive. For example, ADAMS currently does not support standard searches of the type available on Google and other search engines. Simple “Content” searches yield hundreds of documents, many of which may not be relevant to the search inquiry. In performing “Advanced” searches, ADAMS users must select among 15 “Document Properties” and various “Operators” from drop-down menus before entering a search term. The Web-based ADAMS User Guide is nine years old and 44 pages long. These are all significant impediments to the ability of

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<sup>78</sup> *Id.* at D-7.

<sup>79</sup> NUREG-1748, App. C at C-5.

stakeholders—who are not steeped in the intricacies or nuances of using the ADAMS platform—to obtain information necessary to their understanding of an NRC process, specific proceeding, or applicant/licensee action.<sup>80</sup> Once changes to the ADAMS system are made, or a replacement developed, the NRC should offer the public training on the functions of the new or revised system.

The agency also should ensure that local communities are aware of the availability of other types of general resources and information specific to a particular plant or licensing action. For example, the NRC often creates webpages for specific licensing actions that include the application, related correspondence, and NRC’s safety and environmental review documents, and other relevant information. Similarly, in the adjudicatory context, the NRC has created an Electronic Hearing Docket that allows more ready access to hearing-related materials, including pleadings and Licensing Board and Commission orders. It also has devoted webpages to explaining the hearing process and NRC’s Rules of Practice. To accommodate members of local communities who lack ready access to digital resources, the NRC also may consider making paper copies of key documents available in appropriate locations.

In a related vein, the NRC should consider consolidating cites to relevant agency EJ guidance documents, reports, and other resources in a single list that is easily located. As a starting point, the NRC could provide a consolidated list of web links to key EJ historical documents and guidance documents, such as NRC Chairman Selin’s March 1994 letter to President Clinton, NRC’s 1995 EJ Strategy, the 2004 EJ Policy Statement, NRR Office Instruction LIC-203, NUREG-1748, Reg. Guide 4.2, NUREG-1555, and COL/ESP-ISG-026.

## 2. Facilitate EJ Community Access to and Participation in Public Meetings

It is essential that the NRC hold public meetings and information sessions at times and locations that will accommodate various segments of the public (*e.g.*, offering weekday and weeknight sessions). The agency should work with community leaders as well as local officials to determine where the meetings should be held. In doing so, the NRC should strive to obtain input on EJ issues from as wide a range of perspectives as practicable. As noted, some members of the public, especially those in underserved communities, may lack access to broadband technology and telephone service necessary to participate in many webinars/virtual meetings. The NRC should pursue reasonable means for disseminating relevant information and notices to such communities. NRC guidance provides for the use of alternative communication measures as part of the scoping process,<sup>81</sup> and those measures may need to span the duration of the NRC’s environmental review process.

The NRC also should present meeting information in a form that is linguistically accessible, clear, and understandable. This can be accomplished, in part, by minimizing technical and regulatory jargon, arranging for translations of documents when necessary, providing neutral facilitators to conduct

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<sup>80</sup> Although the NRC’s website contains a “Search” function, it does not yield particularly user-friendly and helpful results. Given that many ADAMS documents already appear in Google searches, the NRC might consider adding a customized Google search bar on the NRC webpage in lieu of the current Search function.

<sup>81</sup> See EJ Policy Statement, 69 Fed. Reg. at 52,043 (“The scoping meetings are announced in the *Federal Register*, on the NRC Web site, in local or regional newspapers, posters around the meeting location, and/or on local radio and television stations at least one week before the public meeting. The NRC requests the assistance of tribal, church, and community leaders to disseminate the information to potentially affected groups.”).

public meetings, and using visual aids such as graphs, icons, infographics, and photos. Such measures are important given the technical nature of many NRC licensing and regulatory actions.

The NRC appears to be applying many best practices in an ongoing proceeding concerning the former Church Rock Mill Site located northeast of Gallup, New Mexico, a controversial legacy site that has a long, complex, and contentious history concerning the duration and type of necessary cleanup activities.<sup>82</sup> The licensee has requested that NRC amend its sources materials license to allow disposal of Northeast Church Rock mine waste on top of the tailings impoundment at the Church Rock Mill Site. The amendment also would revise the NRC-approved reclamation plan. The proposal to dispose of the mine spoils at the mill site is part of a broader cleanup action by the EPA under the Comprehensive Environmental Response, Compensation and Liability (CERCLA) process.<sup>83</sup> On the Church Rock matter, the NRC has been working directly with the Navajo Nation Environmental Protection Agency (NNEPA) to engage the Navajo Community and collect comments on its draft EIS (DEIS) for the proposed license amendment. As described in a recent letter to the NNEPA,<sup>84</sup> the NRC has:

- held three public meetings via webinar and land-line telephone (toll-free), including a 3-hour evening session;
- prepared three scripts for radio broadcast that describe the history of the Church Rock mine and mill sites, the DEIS, and the NRC staff's safety evaluation;<sup>85</sup>
- published multiple newspaper ads and meeting notices during the comment period;
- published half and full-page ads in a local newspaper, the *Gallup Independent*, to describe the project and DEIS and explain how to provide comments in May 2021;
- published an 8-page insert in the *Navajo Times* and *Gallup Independent* in August and September 2021 describing the project and DEIS;
- conducted targeted outreach to multiple communities (including Local Navajo Chapters); and
- sent more than 100 paper copies each of key documents (including the NRC's DEIS, DEIS Reader's Guide, and safety evaluation) for distribution within local communities.

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<sup>82</sup> See NRC, "United Nuclear Corporation", <https://www.nrc.gov/info-finder/decommissioning/uranium/united-nuclear-corporation.html>; EPA, "Northeast Church Rock Mine", <https://www.epa.gov/navajo-nation-uranium-cleanup/northeast-church-rock-mine>.

<sup>83</sup> The Church Rock Mill Site operated from 1977 to 1982, processing uranium ore from the Northeast Church Rock Mine under a state of New Mexico license. Since 1988, the mill has been under dual regulatory oversight of the NRC and the EPA, under a Memorandum of Understanding between the two agencies. The NRC is the lead agency regulating surface reclamation and closure activities at the site under an NRC license and the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA). The EPA is the lead agency regulating cleanup of the mine. See NUREG-2243, "Environmental Impact Statement for the Disposal of Mine Waste at the United Nuclear Corporation Mill Site in McKinley County, New Mexico – Draft Report for Comment" (Oct. 2020) (ML20289A62).

<sup>84</sup> Letter from J. Quintero, NRC, to V. Shirley, NNEPA, "Status Update of Church Rock Mill License Amendment and Draft Environmental Impact Statement Outreach Activities" (Sept. 14, 2021) (ML21245A302).

<sup>85</sup> These pre-recorded broadcasts were aired numerous times on local radio stations in English and in the Navajo language during the months of April through September.



3. Consider the Use of Certain EJ Community Outreach and Engagement Methods Being Used by Other Agencies, Particularly the EPA

In the Request for Comment, the NRC notes that it is considering other federal, state, and Tribal agencies' EJ programs to identify actions that the NRC might take to enhance its own consideration of environmental justice. To that end, the NRC may wish to consider the extensive EJ-related resources posted on several other federal agency websites, such as the EPA, DOE, and the Department of Transportation/Federal Highway Administration (DOT/FHWA) websites.<sup>86</sup> The EPA's website provides information that identifies ways that agencies—through the NEPA review process—may learn from communities about impacts on minority populations, low-income populations, and Tribal and indigenous communities, and how to protect such communities and populations from such impacts.<sup>87</sup> The March 2019 *Community Guide to Environmental Justice and NEPA Methods* “lays out a framework for how Federal agencies generally consider EJ in the NEPA process, and summarizes opportunities that [communities] may use to work with these agencies to advance environmental justice.”<sup>88</sup> EPA's June 2016 *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* may be used as an implementation guide to help NRC analysts consider potential EJ concerns identified as part of a regulatory action.<sup>89</sup>

EPA's FY 2020 *Environmental Justice Progress Report*, an annual publication mandated by E.O. 12898, provides numerous examples of effective outreach methods and other practices that increased meaningful engagement and participation opportunities for EJ communities.<sup>90</sup> Some specific examples of actions that may be relevant to the NRC's review of its EJ policy and procedures include:

- Providing technical assistance, workshops, and education to help disadvantaged communities better understand the science, regulations and policies of environmental issues and EPA actions.
- Training agency employees on such topics as effective community engagement and integration of environmental justice into EPA regulatory activities.
- Increasing collaborations with external stakeholder groups and other federal and state agencies to provide consultations, conduct trainings, exchange information, and leverage resources.

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<sup>86</sup> See EPA, “Environmental Justice”, <https://www.epa.gov/environmentaljustice>; DOE, Office of Legacy Management, “Environmental Justice”, <https://www.energy.gov/lm/environmental-justice>; DOT/FHWA, “Environmental Justice”, [https://www.fhwa.dot.gov/environment/environmental\\_justice/](https://www.fhwa.dot.gov/environment/environmental_justice/).

<sup>87</sup> Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* (Mar. 2016), <https://www.epa.gov/environmentaljustice/ej-iwg-promising-practices-ej-methodologies-nepa-reviews>.

<sup>88</sup> Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Community Guide to Environmental Justice and NEPA Methods* (Mar. 2019), <https://www.energy.gov/nepa/downloads/community-guide-environmental-justice-and-nepa-methods>.

<sup>89</sup> EPA, *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (June 2016), [https://www.epa.gov/sites/default/files/2016-06/documents/ejtg\\_5\\_6\\_16\\_v5.1.pdf](https://www.epa.gov/sites/default/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf).

<sup>90</sup> The EPA's annual EJ progress reports are available at <https://www.epa.gov/environmentaljustice/annual-environmental-justice-progress-reports>.

- Consulting and/or partnering with governmental stakeholders to engage EJ community members to gather public comments on proposed projects, permits, etc.
- Holding a session titled “Meaningful Involvement in Tribal Environmental Programs – Building EJ Capacity” during a virtual 2020 Tribal Lands Environmental Forum to discuss the core principles of the EPA’s “Tribal and Indigenous EJ Policy,” to gather input from participants, and to help Tribes to consider ways they can enhance or expand their involvement in environmental decision making.

We recognize that EPA and NRC have different statutory missions and authorities, regulatory priorities, and budgetary resources. However, insofar as both agencies seek to address EJ issues under NEPA, the NRC may look to EPA experience and guidance to identify some potential enhancements to its own EJ framework, especially with regard to community outreach and engagement best practices. We also believe this would be most efficiently accomplished by an internal NRC team as opposed to a newly-created “advisory committee”, as suggested by some public commenters. As described in LIC-203, the NRC recently formed a new Environmental Center of Expertise (EnvCOE) in NMSS. The EnvCOE’s overarching duties include: (1) ensuring that NRC complies with federal environmental laws and properly implements the requirements of 10 CFR Part 51; (2) supporting environmental reviews of agency actions as required by NEPA and other environmental laws, policies and regulations; and (3) developing, maintaining and implementing agency environmental review guidance and training. The EnvCOE is responsible for preparing EISs for licensing actions involving operating reactors and proposed new reactors. It follows that an EJ-specific “advisory” role could appropriately be assigned to the EnvCOE given its NEPA-related oversight role.

#### 4. Optimize NRC Participation in Both Formal and Informal EJ-Related Interagency Activities

As part of its EJ program activities, the EPA collaborates with other agencies to provide consultations, conduct trainings, exchange information, and leverage governmental resources. As described by the EPA, the EJ Interagency Working Group (EJ IWG) “provides a forum for federal agencies to collectively advance environmental justice principles.”<sup>91</sup> Specifically, the EJ IWG seeks to facilitate the active involvement of all Federal agencies to implement E.O. 12898, provides a forum for federal agencies to collectively advance EJ principles, and works as a federal family to increase local community capacity to promote and implement innovative and comprehensive solutions to EJ issues.

The EJ IWG is chaired by the EPA Administrator and includes 17 federal agencies and White House offices with standing committees and other committees established as necessary to carry out responsibilities outlined by the Order. The IWG consists of senior leadership representatives, senior staff representatives, and other persons delegated by an agency.<sup>92</sup> Although the NRC is not one of 17 IWG

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<sup>91</sup> See EPA, “Federal Interagency Working Group on Environmental Justice (EJ IWG)”, <https://www.epa.gov/environmentaljustice/federal-interagency-working-group-environmental-justice-ej-iwg>.

<sup>92</sup> In August 2011, the IWG EJ agencies signed the “Memorandum of Understanding on Environmental Justice and Executive Order 12898” (2011 EJ MOU) to recommit to EJ efforts and address the potential for disproportionate harm from environmental degradation that affects minority and low-income populations, American Indian Tribes, and Alaska Natives.<sup>92</sup> The EJ IWG also adopted a Charter that outlines the governance structure and focus areas for the EJ IWG. Additionally, in 2012, the EJ IWG established the NEPA Committee to improve the effective, efficient, and consistent

member agencies or 2011 EJ MOU signatories, the NRC has participated in EJ IWG and/or NEPA Committee activities through designated NRC staff representatives. However, the nature and extent of the NRC's participation in IWG activities are not discernible from information available in the public domain and should be clarified.

It also warrants mention that the EPA reviews NRC EISs, including the EJ-related portions thereof. Section 309 of the Clean Air Act (CAA) directs the EPA to review all draft EISs prepared by other federal agencies (as well as other certain federal actions), and to make these reviews public, which EPA does by posting EPA comment letters on EISs in an EIS database.<sup>93</sup> These EPA reviews focus on evaluating the adequacy of the information presented in the EIS and identifying and recommending appropriate measures to avoid and mitigate significant environmental impacts associated with the proposal. EPA also conducts reviews of final EISs to ensure that the lead agency considered EPA's comments. EPA has prepared a detailed manual that explains the policies and procedures for carrying out its review responsibilities under NEPA and CAA Section 309, as well as a separate guidance document for EPA staff that review other federal agencies' EJ assessments under Section 309.<sup>94</sup> The EPA also has issued a guidance document for EPA staff who perform Section 309 reviews of NRC NEPA documents for new nuclear power plants.<sup>95</sup> Sections 3.3.5, 5.0, 5.6.3, 6.0, 6.7.3, and Appendix F of that document contain EJ-specific guidance.

#### 5. Clarify the Relationship Between the NRC's Tribal Policy Statement and Tribal Protocol Manual and the NRC EJ Policies and Procedures

In 2017, the NRC issued a Tribal Policy Statement, 82 Fed. Reg. 2402 (Jan. 9, 2017), to encourage and facilitate Tribal involvement in activities under NRC jurisdiction and to provide guidance to ensure consistency across the agency in government-to-government relations with federally-recognized Tribes.<sup>96</sup> The following year, the NRC issued a related Tribal Protocol Manual, NUREG-2173, Rev. 1 (July 2018) (ML18214A663) that "facilitates effective consultations and interactions between the NRC and Native American Tribes related to activities within the scope of the NRC's jurisdiction." Current NRC guidance does not discuss the relationship between these documents and the NRC's EJ review process, as it applies to federally-recognized Tribes. Appendix D to LIC-203, Rev. 4,

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consideration of EJ issues in the NEPA process through the sharing of best practices, lessons learned, research, analysis, training, consultation, and other experiences of federal agencies' NEPA practitioners.

<sup>93</sup> See EPA, "EPA Review Process under Section 309 of the Clean Air Act", <https://www.epa.gov/nepa/epa-review-process-under-section-309-clean-air-act>.

<sup>94</sup> See EPA, "Policy and Procedures for the Review of Federal Actions Impacting the Environment Under Section 309 of the Clean Air Act", <https://www.epa.gov/nepa/policy-and-procedures-review-federal-actions-impacting-environment-under-section-309-clean-air>; EPA, "Final Guidance for Consideration of Environmental Justice in Clean Air Act 309 Reviews" (July 1999), [https://www.epa.gov/sites/default/files/2014-08/documents/enviro\\_justice\\_309review.pdf](https://www.epa.gov/sites/default/files/2014-08/documents/enviro_justice_309review.pdf).

<sup>95</sup> See EPA, "§ 309 Reviewers Guidance for New Nuclear Power Plant Environmental Impact Statements – Final" (2008), <https://www.epa.gov/sites/default/files/2014-08/documents/309-reviewers-guidance-for-new-nuclear-power-plant-eiss-pg.pdf>.

<sup>96</sup> The Tribal Policy Statement centers on six key principles: (1) The NRC Recognizes the Federal Trust Relationship With and Will Uphold Its Trust Responsibility to Indian Tribes; (2) The NRC Recognizes and Is Committed to a Government to Government Relationship with Indian Tribes; (3) The NRC Will Conduct Outreach to Indian Tribes; (4) The NRC Will Engage in Timely Consultation; (5) The NRC Will Coordinate with Other Federal Agencies; and (6) The NRC Will Encourage Participation by State-Recognized Tribes.

for example, states only that “[t]he staff should also seek Tribal representation in the NEPA process in a manner that is consistent with government-to-government relations.” Conversely, neither the Tribal Policy Statement nor the Tribal Protocol Manual mentions the NRC’s EJ Policy Statement.

The NRC appears to be adhering to the principles and protocols set forth in these documents in its current EJ review. For instance, the NRC sent letters to Federally Recognized Tribes on July 9 to provide notice of the NRC staff’s effort and solicit comments, and on August 20 to offer consultation on EJ issues; held a virtual government-to-government meeting on August 31 with representatives of the Nuclear Energy Tribal Working Group and the Tribal Radioactive Materials Transportation Committee; and had a government-to-government meeting on September 7 with Tribal Council members of the Prairie Island Indian Community in Minnesota.<sup>97</sup> Nevertheless, given the synergies that exist between the goals of the NRC’s Tribal Policy Statement and EJ Policy Statement, it would be beneficial for the NRC to clarify the relationship between the two documents, perhaps in a future update to the NRC’s EJ guidance.

## **VI. Discussion of Climate Change Impacts and the Importance of Nuclear Power to Decarbonization Efforts and Avoiding Disparate Impacts to EJ Communities**

Insofar as E.O.s 13990 and 14008 address EJ issues, they do so in the broader context of the climate crisis. Thus, any updated versions of the NRC’s EJ Policy Statement and/or EJ guidance should reflect this fact and the nexus between climate change and environmental justice; *i.e.*, the disproportionately high and adverse impacts that climate change may have on EJ communities. Indeed, last month, the EPA issued a new, peer-reviewed report that examines the degree to which four socially vulnerable populations (defined based on income, educational attainment, race and ethnicity, and age) may be more exposed to the largest impacts of climate change.<sup>98</sup> In this regard, the current administration’s climate and EJ-related goals are closely intertwined.

Notably, the NRC already is considering climate change-related issues and impacts as part of its NEPA reviews, consistent with the Commission’s direction in CLI-09-21. In that order, the Commission stated that it “expect[s] the Staff to include consideration of carbon dioxide and other greenhouse gas emissions in its environmental reviews for major licensing actions under [NEPA],” and that “[t]he Staff should ensure that these issues are addressed consistently in agency NEPA evaluations and, as appropriate, update Staff guidance documents to address greenhouse gas emissions.”<sup>99</sup>

The NRC Staff has adhered to this directive. In the 2019 final EIS for the Clinch River Nuclear Site early site permit application, for example, the staff considered greenhouse gas emissions from the proposed project, as well as potential changes in project impacts considering a new future environmental

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<sup>97</sup> See NRC, “Environmental Justice Public Outreach”, <https://www.nrc.gov/about-nrc/regulatory/licensing/nepa/environmental-justice/public-outreach.html>.

<sup>98</sup> EPA, “Climate Change and Social Vulnerability in the United States: A Focus on Six Impacts” (EPA 430-R-21-003) (Sept. 2021), [www.epa.gov/cira/social-vulnerability-report](http://www.epa.gov/cira/social-vulnerability-report).

<sup>99</sup> *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), CLI-09-21, 70 NRC 927, 931 (2009).

baseline resulting from climate change.<sup>100</sup> The staff included a discussion on environmental justice. Similarly, in its final supplemental EIS for the subsequent license renewal (SLR) for Surry Units 1 and 2, the NRC evaluated greenhouse gas emissions associated with operation of both units and replacement power alternatives; observed changes in climate and potential future climate change during the SLR term based on climate model simulations under future global greenhouse gas emission scenarios; and the potential cumulative impacts from climate change on environmental resources (including EJ-related concerns) where there are incremental impacts of the proposed action.<sup>101</sup>

Recommendation: In considering climate change impacts as part of the NEPA review process, the NRC should take into account nuclear power's significant, beneficial role in avoiding greenhouse gas emissions from the U.S. electrical generation sector.<sup>102</sup> In 2019, nearly 20 percent of U.S. total energy generation, and more than 50 percent of the nation's carbon-free emissions electricity came from nuclear power plants.<sup>103</sup> According to U.S. Energy Information Administration data on power plant operations, nine of the ten power plants that generated the most electricity in 2019 were nuclear plants.<sup>104</sup> Moreover, in 2019, U.S. nuclear power plants achieved their highest electricity generation.<sup>105</sup> As a result, every year, nuclear-generated electricity avoids more than 470 million metric tons of carbon dioxide emissions that would otherwise come from fossil fuels—the equivalent of removing nearly 100 million passenger vehicles from the road. Nuclear also has one of the lowest life-cycle carbon emission rates of all generation technologies, even when accounting for indirect emissions associated with the mining of fuel and plant construction.<sup>106</sup> In addition, nuclear plants avoid the emission of air pollutants that contribute to health issues like stroke, heart disease, neurological disease, lung cancer and respiratory diseases. Due to its high-energy density, nuclear power also limits the facility's land use footprint and reduces wildlife impacts.

Nuclear power avoids adverse climate change and air quality impacts that have been shown to disproportionately affect disadvantaged communities. Nuclear power also would avoid carbon emissions by supplying process heat or electricity to support historically carbon-intensive industrial applications, including desalination, synthetic and unconventional oil production, oil refining, biomass-based ethanol production, hydrogen production, and cryptocurrency mining. As Dr. Kathryn Huff, Principal Deputy

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<sup>100</sup> See "Environmental Impact Statement for an Early Site Permit (ESP) at the Clinch River Nuclear Site: Final Report," NUREG-2226, Vols. 1 & 2 (Apr. 2019), <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2226/index.html>.

<sup>101</sup> See "Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Subsequent License Renewal for Surry Power Station Units 1 and 2", NUREG-1437, Supplement 6, Second Renewal, Final Report) (Apr. 2020) (ML20071D538).

<sup>102</sup> Nuclear energy also plays a significant role in the global energy mix. In its roadmap for reaching a net-zero emissions energy system by 2050, the International Energy Agency (IAE) concluded that use of nuclear energy must nearly double alongside the expanded use of other carbon-free technologies. See IAE, *Net Zero by 2050: A Roadmap for the Global Energy Sector*, at 57 (May 2021), <https://www.iea.org/reports/net-zero-by-2050>.

<sup>103</sup> See note 4, *supra*. See also NEI, *Nuclear by the Numbers*, at 7, 11 (Aug. 2020), <https://www.nei.org/resources/fact-sheets/nuclear-by-the-numbers>.

<sup>104</sup> EIA, *Today in Energy*, "In 2019, 9 of the 10 highest-generating U.S. power plants were nuclear plants" (Sept. 25, 2020), <https://www.eia.gov/todayinenergy/detail.php?id=45276#>.

<sup>105</sup> *Nuclear by the Numbers*, at 9. From 2014 to 2019, total U.S. nuclear electricity generation increased from 797.2 to 809.4 billion kilowatt-hours, despite a number of premature plant retirements during that same period.

<sup>106</sup> See note 5, *supra*.

Assistant Secretary for DOE’s Office of Nuclear Energy, summed it up: “Nuclear can play a role in the transition to a clean energy economy by fundamentally enabling our nation’s targets for clean, carbon-free electricity as well as non-electric energy markets. We have the potential to decarbonize many industrial sectors in the United States and abroad.”<sup>107</sup> Thus, in discussing climate change impacts and their effects on EJ communities, the NRC should disclose in its NEPA analyses nuclear energy’s role in avoiding such effects and contributing to an environmentally just transition to a decarbonized economy.

## **VII. Guidance on EJ-Related Mitigation Measures**

The EJ Policy Statement makes numerous references to mitigation, and states that “[t]he NRC’s goal is to identify and adequately weigh, or mitigate, effects on low-income and minority communities that become apparent only by considering factors peculiar to those communities.”<sup>108</sup> It further notes that NRR and NMSS staff guidance in LIC-203 and NUREG-1748, respectively, adequately addresses the issue of mitigation.

**Recommendation:** The NRC should clarify the extent of the Commission’s authority to require EJ-related mitigation measures in a given case. In short, the NRC’s ability to impose additional requirements and mitigation measures beyond those proposed in a license application is limited to those with a reasonable nexus to NRC’s duty to protect radiological health and safety and the common defense and security. While the NRC has this authority, it derives from the AEA.<sup>109</sup> However, the NRC does have the ability to *encourage* licensees to take certain non-radiological-related mitigation measures, and to hold licensees to key mitigation measures to which they have voluntarily committed in their applications and which are subsequently incorporated in an NRC license (either directly or by reference).

## **VIII. Clarification of EJ Issues in Environmental Assessments**

The EJ Policy Statement’s discussion of when and to what extent EJ issues should be addressed in environmental assessments (EA) lacks sufficient clarity. In one place, the Policy Statement notes:

In most EAs, the Commission expects that there will be little or no offsite impacts and, consequently, impacts would not occur to people outside the facility. However, if there is a clear potential for significant offsite impacts from the proposed action, then an appropriate EJ review *might* be needed to provide a basis for concluding that there are no unique impacts that would be significant. If the impacts are significant because of the

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<sup>107</sup> DOE, Office of Nuclear Energy, “Q&A: Acting Assistant Secretary Dr. Kathryn Huff Shares Her Vision for the Future of Nuclear Energy” (June 24, 2021), <https://www.energy.gov/ne/articles/qa-acting-assistant-secretary-dr-kathryn-huff-shares-her-vision-future-nuclear-energy>.

<sup>108</sup> EJ Policy Statement, 69 Fed. Reg. at 52,041.

<sup>109</sup> See, e.g., *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI-11-14, 74 NRC 801, 813 (2011) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 n.16 (1989)) (“NEPA is a procedural statute—although it requires a ‘hard look’ at mitigation measures, it does not, in and of itself, provide the statutory basis for their implementation.”).

uniqueness of the communities, then a FONSI [finding of no significant impact] may not be possible and mitigation or an EIS should be considered.<sup>110</sup>

In another place, the Policy Statement indicates that when “a proposed action has clear potential for offsite impacts to minority and low-income communities . . . an EJ analysis *will* be done during the preparation of an EA.”<sup>111</sup> These two statements seem inconsistent, insofar as the clear potential for offsite impacts would appear to necessitate an EJ review (i.e., identification of the composition and location of any EJ community within the relevant geographic area and their unique attributes) to ascertain whether the offsite impacts could be significant due to the unique characteristics of a nearby EJ community.

Recommendation: The NRC should clarify this issue in any future update to its Policy Statement and/or EJ guidance.

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<sup>110</sup> EJ Policy Statement, 69 Fed. Reg. at 52,047 (emphasis added).

<sup>111</sup> *Id.* at 52,045.