



Edison Electric
INSTITUTE

Power by Association™

Jomar Maldonado
Director for NEPA
Council on Environmental Quality
730 Jackson Place NW
Washington, DC 20503

Re: National Environmental Policy Act Guidance on Consideration of Greenhouse Gas
Emissions and Climate Change
Docket No. CEQ-2022-0005

[SUBMITTED ELECTRONICALLY]

Director Maldonado,

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments to the Council on Environmental Quality (CEQ) on their interim guidance, National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (Interim Guidance) 88 *Fed. Reg.* 1,196 (Jan. 9, 2023). The Interim Guidance is intended to assist agencies in analyzing greenhouse gas (GHG) and climate change effects of their proposed actions under the National Environmental Policy Act (NEPA). *Id.* at 1,196.

EEI is the association that represents all U.S. investor-owned electric companies. EEI members provide electricity for more than 235 million Americans and operate in all 50 states and the District of Columbia. The electric power industry supports more than seven million jobs in communities across the United States. EEI members invest more than \$140 billion annually to make the energy grid smarter, cleaner, more dynamic, more flexible, and more secure; to diversify the nation's energy mix; and to integrate new technologies that benefit both customers and the environment.

These critical infrastructure projects frequently require federal permits and, therefore, EEI members support guidance that enables agencies to conduct reviews that ensure that agencies can assess the impacts of direct and indirect GHG emissions for energy infrastructure projects in a manner that properly informs reasoned decision making, withstands judicial scrutiny, and respects the spirit of the statute.

Questions on these comments may be directed to [Patrick McGuire](#) (202-508-5167), [Riaz Mohammed](#) (202-508-5036).

Sincerely,

M. Patrick McGuire
Counsel, Clean Energy & Infrastructure Deployment

**COMMENTS FROM THE EDISON ELECTRIC INSTITUTE
ON THE COUNCIL ON ENVIRONMENTAL QUALITY'S NATIONAL ENVIRONMENTAL
POLICY ACT GUIDANCE ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND
CLIMATE CHANGE**

Docket: CEQ-2022-0005

April 10, 2023

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments to the Council on Environmental Quality (CEQ) on their interim guidance, *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change* (Interim Guidance) 88 *Fed. Reg.* 1,196 (Jan. 9, 2023). The Interim Guidance is intended to assist agencies in analyzing greenhouse gas (GHG) and climate change effects of their proposed actions under the National Environmental Policy Act (NEPA). *Id.* at 1,196.

EEI is the association that represents all U.S. investor-owned electric companies. EEI members provide electricity for more than 235 million Americans and operate in all 50 states and the District of Columbia. The electric power industry supports more than seven million jobs in communities across the United States. EEI members invest more than \$140 billion annually to make the energy grid smarter, cleaner, more dynamic, more flexible, and more secure; to diversify the nation's energy mix; and to integrate new technologies that benefit both customers and the environment. EEI members are united in their commitment to get the energy they provide as clean as they can, as fast as they can, while keeping reliability and affordability front and center, as always, for the customers and communities they serve. Across the nation, EEI members are leading a clean energy transformation, making significant progress to reduce greenhouse gas (GHG) emissions in our sector, while also creating good-paying jobs and an equitable clean energy future.

EEI members' critical clean energy infrastructure projects frequently require federal permits. Therefore, EEI members support guidance that enables agencies to conduct environmental reviews that ensure the assessment of direct and indirect GHG emissions impacts for clean energy infrastructure projects in a manner that properly informs reasoned decision making, withstands judicial scrutiny, and respects NEPA.

I. Electric Companies Continue To Lead The Clean Energy Transformation.

EEI members are in the middle of a profound, long-term transformation in how electricity is generated, transmitted, and used. This transformation is being driven by a wide range of factors, including relatively lower prices for natural gas, particularly as compared to historic high prices, and renewable energy resources energy efficiency and demand-side management; technological improvements; changing customer; investor and owner expectations; federal and state regulations and policies; legislation such as the Infrastructure Investment and Jobs Act¹ (IIJA) and Inflation Reduction Act of 2022² (IRA); and the increasing use of distributed energy resources. EEI members are well-positioned to continue to lead the nation's clean energy transformation. With the right policies and technologies, a 100 percent clean energy future can be more than a goal, it can be a reality. Across the industry, companies are investing in a broad range of affordable, carbon-free technologies and approaches with the goal of finding the most cost-effective ways to deliver resilient clean energy.

¹ Pub. L. No. 117-58.

² Pub. L. No. 117-169.

The mix of resources used to generate electricity in the United States has changed dramatically over the last decade and is increasingly cleaner.³ In 2022, for the first time, renewables⁴ exceeded coal, representing 22.6 percent of total generation at utility scale facilities in the United States compared to coal-fired generation at about 19 percent.⁵ 2016 marked the first year that natural gas exceeded coal as the main source of electricity generation, and in 2022 natural gas powered approximately 40 percent of the country's total electricity generation at utility scale facilities. In total, more than 40 percent of America's electricity came from clean carbon-free resources in 2022, including nuclear energy, hydropower, solar, and wind.⁶

Energy storage is a key asset in helping the grid integrate increasing amounts of renewables and offering resilience and reliability. Electric companies are the largest users and operators of the

³ See U.S. Energy Information Administration (EIA), Today in Energy: Renewable generation surpassed coal and nuclear in the U.S. electric power sector in 2022 (Mar. 27, 2023), <https://www.eia.gov/todayinenergy/detail.php?id=55960&src=email>; See also EIA, Electric Power Monthly: Data for February 2023—Table 1.1 Net Generation by Energy Source: Total (All Sectors), 2013-February 2023 (Mar. 24, 2023), https://www.eia.gov/electricity/monthly/xls/table_1_01.xlsx; and EIA, Electric Power Monthly: Data for February 2023—Table 1.1.A. Net Generation from Renewable Sources: Total (All Sectors) (Mar. 24, 2023), https://www.eia.gov/electricity/monthly/xls/table_1_01_a.xlsx.

⁴ Renewables here include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, hydroelectric conventional, solar thermal, photovoltaic energy, solar, and wind. See EIA, Electric Power Monthly, Table 1.1, *supra* n. 3.

⁵ See *id.*

⁶ See *id.*

approximately 32 gigawatts (GW) of operational storage in the country—representing 93 percent of active energy storage projects.⁷

Renewable energy deployments will continue. EIA predicts that declining capital costs for solar panels, wind turbines, and battery storage, as well as government subsidies, will result in renewables becoming increasingly cost effective compared with the alternatives when building new power capacity.⁸ EIA projects that in the United States that renewable generation will more than triple by 2050, with both wind and solar responsible for most of the growth.⁹

These changes have profoundly decreased the sector's carbon dioxide (CO₂) emissions, the primary greenhouse gas emissions associated with electricity production. EIA's preliminary full-year estimates for 2022 are that electric power sector CO₂ emissions were 36 percent below 2005 levels, as low as they were almost 40 years ago.¹⁰ These reductions will continue.¹¹ Further, fifty

⁷ Compiled from the following proprietary source *Wood Mackenzie Power & Renewables/American Clean Power Association U.S. Energy Storage Monitor* (2022); *Dept of Energy's Energy Storage Database* (2022); *Hitachi Energy, The Velocity Suite Database* (2022).

⁸ EIA, *Annual Energy Outlook 2023 (AEO2023)* 9 (Mar. 16, 2023), https://www.eia.gov/outlooks/aeo/pdf/AEO2023_Narrative.pdf.

⁹ See AEO2023—Table 16. Renewable Energy Generating Capacity and Generation: Electric Power Sector: Generation: Total (Mar. 16, 2023), <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=16-AEO2023®ion=0-0&cases=ref2023&start=2021&end=2050&f=A&linechart=ref2023-d020623a.25-16-AEO2023~&ctype=linechart&sid=ref2023-d020623a.25-16-AEO2023~ref2023-d020623a.64-16-AEO2023&sourcekey=0>.

¹⁰ See EIA, *Monthly Energy Review, Environment*, Table 11.6—Electric Power Sector (Mar. 2023), <https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf>.

¹¹ AEO2023 at 4.

EEI members have announced forward-looking carbon reduction goals, 41 of which include a net-zero by 2050 or earlier equivalent goal, and members are routinely increasing the ambition or speed of their goals or altogether transforming them into net-zero goals.

In addition, the electric industry has significantly reduced air pollutants such as mercury, hazardous air pollutants (HAPs), sulfur dioxide (SO₂), and nitrogen oxides (NO_x). As of 2021, SO₂ and NO_x emissions have declined 95 and 88 percent, respectively, since 1990.¹² In addition, mercury emissions have declined by 95 percent since 2010,¹³ and total HAPs—including all acid gas emissions—declined by 96 percent between 2010 to 2017.¹⁴

EEI's member companies see a clear path to continued emissions reductions over the next decade using current technologies, including nuclear power, natural gas-based generation, energy demand efficiency, energy storage, and deployment of new renewable energy—especially wind and solar¹⁵—as older coal-based and less-efficient natural gas-based generating units retire.¹⁶ These technologies will continue to enable significant, cost-effective carbon reductions.

¹² See EPA, Power Plant Emissions Trends (Feb. 2023), <https://www.epa.gov/power-sector/power-plant-emission-trends>.

¹³ See EPA, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards 2-7 (Dec. 2011), <https://www.epa.gov/sites/default/files/2015-11/documents/matsriafinal.pdf>

¹⁴ See 84 *Fed. Reg.* 2,670, 2,689 (Feb. 7, 2019).

¹⁵ Once built and when the resource is available, wind and solar are the least cost resources to operate to meet electricity demand because they have zero fuel costs. Over time, the combined investment and operating cost advantage increases the share of zero-carbon electricity generation. See AEO2023 at 5.

¹⁶ EIA notes that coal-fired generation capacity will decline sharply by 2030 to about 50% of current levels (about 200 GW) with a more gradual decline thereafter. See AEO2023 at 13.

In the long term, reaching net-zero carbon emissions also will require the deployment of next-generation, carbon-free, 24/7, dispatchable technologies not currently available commercially. Developing a broad range of advanced clean energy technologies can help further expedite the transition of the electric power sector to one that is low- or non-emitting while keeping electricity affordable and reliable for customers.

II. Placing GHG Analyses In Context Allows Agencies To Provide A Qualitative Assessment Of The Potential Impacts Of A Proposed Permit or Action.

GHG emissions are relevant to NEPA analyses, and considering such emissions is appropriate in the context of environmental reviews designed to ensure well-informed federal decision-making. CEQ should encourage agencies to consider existing emissions estimates when relevant, including sector-wide estimates, when assessing GHG emissions impacts. Sector-wide contextualization is particularly important when agencies must undertake NEPA GHG analyses for specific energy projects.

- a. GHG emissions should be evaluated. However, GHG emissions and potential climate impacts alone are not the only relevant or determinative factor in NEPA analyses.**

NEPA requires federal agencies to consider environmental impacts of proposed actions as part of agencies' decision-making processes. NEPA is not, in and of itself, determinative of project approval. NEPA simply prescribes the steps by which agencies must evaluate options and explain their decision-making. GHG emissions are relevant to NEPA analyses, and considering such emissions directly associated with a proposed action is appropriate in the context of environmental reviews designed to ensure well-informed decision-making.¹⁷

¹⁷ For example, several courts have found that agencies' failure to quantify reasonably foreseeable GHG emissions render NEPA analysis insufficient. *See, e.g., Sabal Trail*

CEQ reaffirming the “rule of reason” is well-founded. The “rule of reason” is well-established in NEPA case law and helps agencies “right-size” NEPA reviews in terms of the level of significance (*e.g.*, environmental assessment versus environmental impact statement), the range of alternatives selected for analysis, and the thoroughness of that analysis.¹⁸ However, while GHG emissions alone cannot and should not drive federal decision-making, agencies should take steps to reasonably quantify GHG emissions—and appropriately contextualize and caveat such quantifications—to satisfy NEPA’s informational requirements and to minimize challenges to environmental reviews on the grounds that they did not adequately address such emissions. This includes, where appropriate, reasonably foreseeable indirect or cumulative effects—including GHG emissions—as these effects may be relevant to selection of an alternative and courts have found failure to consider them a violation of NEPA.¹⁹ Accordingly, a reasonable and legally defensible reading of the statute requires that, where appropriate, NEPA analyses include a consideration of the indirect and cumulative impacts, including any beneficial net impacts of GHG emissions from a project. Specifically, those analyses should not be unbound but should

Transmission, LLC v. 3.921 Acres of Land in Lake Cnty. Fla., 5:16-cv-178-JSM-PRL (M.D. Fla. Nov. 24, 2021), *Sierra Club v. FERC*, 867 F.3d 1357 (D.C. Cir. 2017); *WildEarth Guardians v. Zinke*, No. 1:16-cv-1724 (D.D. C. Mar. 19, 2019); *Indigenous Environmental Network v. U.S. Dept. of State*, No. 4:17-cv-00029 (D. Mont. Nov. 8, 2018).

¹⁸ *See, e.g., DOT v. Pub. Citizen*, 541 U.S. 752, 767 (2004) (“inherent in NEPA and its implementing regulations is a ‘rule of reason,’ which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision-making process”); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991) (“the rule of reason governs ‘both which alternatives the agency must discuss, and the extent to which it must discuss them’”).

¹⁹ *See, e.g., WildEarth Guardians*, n.17, *supra* (finding that the Bureau of Land Management (BLM) was required to consider in its NEPA analysis the reasonably foreseeable indirect emissions from oil and gas leasing but remanding to BLM to determine whether and how to attempt quantification of those emissions).

use other environmental, contextual, and statutory factors to help to put emissions in the appropriate context. This may also help projects withstand judicial delays, as discussed *infra*.

This is a key consideration for electric companies since legally insufficient NEPA analyses can lead to costly delays in the permitting of critical energy infrastructure.

Further, to ensure a proper balance between the scope and level of analysis, CEQ should continue applying the concept of proportionality, especially for projects with insignificant GHG emissions. CEQ should proceed as explained in the Interim Guidance:

The rule of reason and the concept of proportionality caution against providing an in-depth analysis of emissions regardless of the insignificance of the quantity of GHG emissions that the proposed action would cause. For example, some proposed actions may involve net GHG emission reductions or no net GHG increase, such as certain infrastructure or renewable energy projects. For such actions, agencies should generally quantify projected GHG emission reductions, but may apply the rule of reason when determining the appropriate depth of analysis such that precision regarding emission reduction benefits does not come at the expense of efficient and accessible analysis. Absent exceptional circumstances, the relative minor and short-term GHG emissions associated with construction of certain renewable energy projects, such as utility-scale solar and offshore wind, should not warrant a detailed analysis of lifetime GHG emissions. As a second example, actions with only small GHG emissions may be able to rely on less detailed emissions estimates. 88 *Fed. Reg.* at 1,202.

- b. Context is important for cumulative effects. In evaluating a proposed action's cumulative climate change effects, an agency should consider the proposed action in the context of the emissions from past, present, and reasonably foreseeable actions.**

CEQ correctly encourages agencies to consider existing emissions estimates where relevant, including sector-wide estimates, relative to the existing baseline when assessing GHG emissions impacts. Sector-wide contextualization is particularly important when agencies must undertake NEPA GHG analyses for specific energy projects.

GHGs, unlike other pollutants, are a well-mixed pollutant, meaning that the amount measured in the atmosphere is roughly the same all over the world, regardless of the location of any particular source of emissions. Given the well-mixed nature of GHGs, agencies should have the ability to consider power sector reductions in both GHG and other emissions for projects or proposed actions that implicate electricity generation, transmission, or distribution when reasonable and suggested by the project proponent. Sector-wide assessments of total GHG emissions and emissions trends can help federal agencies and interested stakeholders better understand the potential direct, indirect, and cumulative emissions impacts of a proposed action. For example, sector-wide assessments can help demonstrate that a particular project—such as a new electric transmission line or natural gas pipeline—serves to reduce indirect emissions by allowing electric companies to integrate more renewable resources or shift fuel sources. It is important to note that in addition to reducing electric sector GHG emissions, the infrastructure needed to connect these renewable resources to the grid allow the transition in a reliable and cost-effective manner for our customers.

Where GHG emissions are difficult to quantify, sector-wide emissions assessments can provide helpful context that allows agencies to provide a qualitative assessment of the potential impacts of a proposed permit or action. Reliable sector-wide assessments can help inform both agency decision-making and interested stakeholders consistent with the requirements and objectives of NEPA. CEQ should finalize this approach in its guidance document.

c. CEQ should clarify its suggestion that federal agencies consider the effect of climate change on a proposed project.

CEQ suggests that federal agencies consider not just the “impacts of a proposed project on climate change,” but also the “impacts of climate change on a proposed project.” *Id.* at 1,207.

CEQ suggest that this could include the siting and design of a proposed project. *Id.* However, in most cases, siting and design decisions are not within the purview of the federal agency and thus are outside the scope of its review. For example, authority over the siting of electric transmission facilities has traditionally resided solely with states (with narrowly prescribed exceptions under the Federal Power Act, *e.g.*, where DOE has designated a “national interest electric transmission corridor”). CEQ should clarify how federal agencies, which have no siting authority, are to consider the effects of climate change on a proposed action as part of a NEPA review.

III. Incorporation By Reference Is A Well-Founded Efficiency Mechanism.

CEQ appropriately encourages the use of existing studies and environmental analyses in the NEPA process—called “tiering.” Federal agencies utilizing tiering to build upon previously conducted environmental studies and analyses, as well as earlier decisions made during the federal, state, or local public reviews, is reasonable and appropriate for improving the efficiency of the overall review process. Likewise, federal agencies should incorporate by reference earlier studies and analyses that are relevant to the current proposed project, thereby building upon previous work in an efficient manner. Requiring new processes or materials that do not substantively add any new information to the decision-making and review process is an inefficient use of agency resources and delays the timeline without any commensurate benefit.

Requiring federal agencies to tier and incorporate by reference would minimize duplication of analysis on subjects where another agency may be the subject matter expert. This will ensure that

the lead agency is provided, and is utilizing, the most appropriate information in making their decision. Tiering and incorporating by reference are proven and effective methods of making the NEPA review process more efficient and CEQ should finalize the proposed changes to these sections. CEQ also should consider whether to provide additional guidance on how to appropriately tier off of a previous study as well as whether to create a “library” or repository of earlier studies that is available to the federal agencies as well as interested parties in order to allow project proponents and agencies to quickly and efficiently find relevant material that can be utilized during the review process.

IV. Programmatic NEPA Reviews And Other Studies Are A Well-Founded Efficiency Mechanism.

CEQ should encourage the use of programmatic NEPA reviews to streamline the permitting process for clean energy, including hydro re-licensing and transmission line buildout. Recent legislation aimed at facilitating transmission development highlights an opportunity for the Department of Energy (DOE) to take steps to enable more expeditious and legally durable project specific NEPA reviews.²⁰ Programmatic environmental reviews that encompass all potential transmission development projects at a regional scale are a tool to accomplish this goal. Any site-specific analysis for an individual project within the programmatic review range, to the extent further review is necessary, can tier to the programmatic review. Proceeding in this manner, rather than having to prepare piecemeal environmental analyses for every transmission project that involves a major federal action, would be more efficient and help facilitate the clean energy transformation. This approach recognizes that transmission expansion addresses regional

²⁰ See Pub. L. No. 117-58.

efforts to support a cleaner, more resilient energy grid, which, in turn, will support greenhouse gas emissions reductions across the economy.

CEQ notes other potential uses of programmatic reviews to streamline permitting processes, including USDA Forest Service Land Maps. 88 *Fed. Reg.* at 1,202. A programmatic NEPA review serves as an efficient mechanism in which to assess Federal agency efforts to adopt broad-scale sustainable practices for energy efficiency, GHG emissions avoidance and emissions reduction measures, petroleum product use reduction, and renewable energy use, as well as other sustainability practices and should be finalized by CEQ. In addition to programmatic reviews, EEI also urges the CEQ to continue the evaluation and adoption of appropriate categorical exclusions to support efficient permitting.

V. Conclusion.

CEQ should finalize their Interim Guidance with the recommendations made in these comments in order to facilitate the efficient construction and maintenance of critical infrastructure as EEI members deploy increasing amounts of clean energy, while still meeting the environmental goals of NEPA. Critically, this includes properly contextualizing GHG emissions, especially as EEI members increasingly deploy more carbon-free generation. CEQ should also provide additional encouragement regarding the use of tiering and programmatic NEPA reviews, especially as it relates to clean energy and transmission line buildout. Questions on these comments may be directed to [Alex Bond](#) (202- 508-5523); [Riaz Mohammed](#) (202-508-5036); or [Patrick McGuire](#) (202-508-5167).