Columbia Law School | COLUMBIA CLIMATE SCHOOL SABIN CENTER FOR CLIMATE CHANGE LAW

April 4, 2023

Federal Energy Regulatory Commission Office of the Secretary 888 First Street NE Washington, DC 20426

Via http://www.ferc.gov

Re: Applications for Permits to Site Interstate Electric Transmission Facilities [Docket No. RM22-7-000]

To whom it may concern:

The Sabin Center for Climate Change Law ("Sabin Center") submits these comments in response to the Notice of Proposed Rulemaking ("NOPR") on "Applications for Permits to Site Interstate Electric Transmission Facilities" issued by the Federal Energy Regulatory Commission ("FERC" or "Commission") on December 15, 2022.

The Sabin Center strongly supports FERC's proposed revisions to its existing regulations on the permitting of interstate transmission facilities under section 216 of the Federal Power Act ("FPA"). As FERC has noted, in the 2021 Infrastructure Investment and Jobs Act ("IIJA"), Congress amended section 216 of the FPA to (among other things) expand the Commission's authority to permit interstate transmission facilities. FERC's proposed regulatory revisions are essential to ensure consistency with the amendments and will also help to further the goals underlying them by streamlining the section 216 permitting process. We therefore support the proposed revisions but recommend that FERC consider additional regulatory reforms to further improve the permitting process.

This comment letter addresses two of FERC's proposed reforms concerning federal jurisdiction vis-à-vis state siting proceedings: (1) the sequencing of state and federal filings; and (2) the circumstances under which FERC will exercise its backstop siting authority. With respect to point (1), the Sabin Center supports FERC's proposal to allow the federal pre-filing process to occur in parallel with state reviews, including by eliminating the mandatory one-year delay between the filing of state applications and the commencement of the federal pre-filing process. The Sabin Center agrees that applicants should be allowed to commence the federal pre-filing process immediately after filing state applications. However, as we explain in these comments, the Sabin Center believes the 90-day window for state review of the federal pre-filing process should begin one year after the start of the state review, not one year start of the federal pre-filing process.

¹ Applications for Permits to Site Interstate Electric Transmission Facilities, Notice of Proposed Rulemaking, 181 FERC ¶ 61,205 (Dec. 15, 2022) [hereinafter "FERC NOPR"]. The FERC NOPR is also available in the Federal Register at 88 Fed. Reg. 2,770 (Jan. 17, 2023), https://www.govinfo.gov/content/pkg/FR-2023-01-17/pdf/2022-27716.pdf.

With respect to point (2), the Sabin Center urges FERC to clarify the circumstances under which it will use its backstop siting authority under section 216. Among other things, FERC should provide additional guidance on how it will evaluate whether a transmission project "is consistent with the public interest" under section 216(b)(3) of the FPA. As courts have reasoned in analogous contexts, determining whether a project is consistent with the public interest requires that FERC evaluate the project's effects on energy supply and prices, as well as its environmental effects. When considering environmental effects, FERC must consider not only a project's local impacts, but also its impact on greenhouse gas emissions, which are the leading cause of global climate change.

This comment letter also addresses two of FERC's proposed reforms concerning environmental review: (1) the disclosure of greenhouse gas emissions; and (2) the disclosure of climate change risk and resilience. With respect to point (1), the Sabin Center urges FERC to explicitly require that applicants disclose the greenhouse gas impacts of transmission projects, including reasonably foreseeable indirect effects. Specifically, FERC should clarify that the Air Quality and Environmental Noise Resource Report submitted by applicants must include an estimate of project-related greenhouse gas emissions, including upstream emissions associated with electricity generation at facilities served by the transmission project. Because those emissions are a reasonably foreseeable indirect effect of the project, they must be evaluated under the National Environmental Policy Act (NEPA). With respect to point (2), the Sabin Center supports FERC's proposal to require applicants to submit information concerning the exposure of a project to climate change risk and resilience to climate change risk. This type of information is necessary for FERC to conduct a proper review under NEPA, as clarified by recent guidance issued by the Council on Environmental Quality (CEQ). But it is not sufficient. FERC should also require applicants to submit information about how they assessed climate-related risks and resilience so that FERC can properly evaluate the adequacy of applicants' assessments and address any shortcomings.

A. <u>Federal Jurisdiction and State Siting Proceedings</u>

1. FERC Should Allow the Federal Pre-filing Process to Occur in Parallel with State Reviews

The Sabin Center supports FERC's proposal to allow transmission developers that have applied for state approval of an interstate facility to begin the federal pre-filing process at any time after submitting their state application. As FERC rightly notes, such an approach is consistent with, and furthers the goals of, section 216 of the FPA (as amended by the IIJA).²

Section 216 of the FPA gives FERC "backstop" authority to approve the siting of interstate transmission facilities in certain circumstances. For example, under section 216(b)(C)(i) of the FPA, FERC may exercise its backstop authority when a state or other entity with primary siting authority has not made a decision on an application to site a transmission facility within one year (provided certain other requirements are met).³ By conferring this authority on FERC, Congress aimed to ensure the timely processing of applications. Congress blamed "state regulatory approval" for "delays [in the] siting of new transmission lines" and enacted section 216 in 2005 to

³ 16 U.S.C. § 824p(b)(1)(C).

² FERC NOPR at ¶¶ 19-21.

⁴ H.R. Rep. No. 109-215, 171 (2005).

"expedite[] the construction of critical transmission lines." FERC's proposed approach to prefiling will help to achieve this goal.

Eliminating the mandatory one-year delay between the filing of state applications and the commencement of the federal pre-filing process will improve efficiency and ensure more timely decision-making by FERC. The information applicants are required to submit in state siting processes is often duplicative of what is required under the federal pre-filing process. Allowing the state and federal processes to occur in parallel will, therefore, simplify and streamline information collection for applicants. It could also reduce the burden on other stakeholders (e.g., by reducing the volume of material they must review) and thus enable them to participate more effectively in both state and federal processes.

FERC's proposal does not, in any way, undermine or diminish states' primary authority over transmission siting. On the contrary, allowing the federal pre-filing process to occur in parallel with state review may, in fact, improve states' ability to exercise their primary authority. States are key participants in the federal pre-filing process and, through it, may obtain useful information that could help to inform their own decision-making. We recognize, as FERC has, that some states may have limited ability to engage in the federal pre-filing process while conducting their own reviews. We therefore support FERC's proposal to allow additional time for states to comment on the prefiling process, but recommend that time be limited so as to ensure the federal process can proceed in a timely and efficient manner. FERC has proposed to provide states with a "90-day window," starting "one-year after the commencement of the Commission's pre-filing process, if a state has not made a determination on an application" by that date. 8 In our view, the 90-day window should begin one year after the start of the state review, *not* the start of the federal pre-filing process. This is important because the federal pre-filing process will, necessarily, start after any state review but may not take a full year to complete for all projects. Where the pre-filing process is completed within one year after the start of the state review—i.e., the trigger for FERC's exercise of backstop authority under section 216(b)(1)(C) of the FPA—the applicant should not be required to wait more than 90 days to submit a formal application to FERC. Tying the 90-day window to one year after the start of state review will therefore minimize delays while still ensuring states have sufficient time to engage in the federal process.

It should be noted that, while FERC is proposing to change its existing practices with respect to pre-filing, that change is not based on any reinterpretation of section 216 of the FPA and does not result in any expansion of FERC's authority under that section. Over the nearly twenty years since Congress enacted section 216 of the FPA, FERC has consistently viewed it as authorizing parallel federal and state processes. As FERC noted in 2006 in Order No. 689:

⁵ *Id.* at 261.

⁶ FERC NOPR, *supra* note 1, at ¶ 22.

⁷ *Id.* at ¶ 23.

⁸ *Id*.

⁹ As FERC has previously recognized, the length of the pre-filing process will "depend upon, among other things, the size of the project, stakeholder participation, and the applicant's preparedness." While "the pre-filing process for extensive projects may take at least a year to complete," less time will be required for more "minor" projects, such as those involving "modifications to existing facilities." *See* Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Corridors, Notice of Proposed Rulemaking, 115 FERC ¶ 61,334 at ¶ 21 (June 16, 2006).

[T]he language of FPA section 216 provides for this potential overlap [of the federal and state processes] by allowing the Commission to issue a construction permit one year after the State siting process has begun and requiring an expeditious pre-application mechanism for all permit decisions under Federal law. Thus, the Commission pre-filing process can occur at the same time as parallel State proceedings. To ensure that needed infrastructure is built, Congress therefore adopted a statutory scheme that permits parallel proceedings. ¹⁰

FERC previously elected to delay the start of the federal pre-filing process but always maintained that it was not required to do so and would reconsider its approach if it determined that it was "delaying projects or otherwise not in the public interest." As explained above, the changes FERC is now proposing (i.e., to allow applicants to begin the federal pre-filing process at any time after submitting their state application) are necessary to ensure projects are reviewed in a timely and efficient manner, and thus further the public interest.

2. FERC Should Clarify How It Will Exercise Its Backstop Siting Authority

In the IIJA, Congress amended section 216 of the FPA to expand FERC's backstop siting authority over transmission projects. As a result of the amendments, there are now six "triggers" for exercise of FERC's backstop authority, set out in section 216(b)(1) of the FPA. However, even where one of those triggers applies, FERC may only permit a project if the criteria set out in section 216(b)(2)-(6) are met. Those criteria are as follows:

- (2) the facilities to be authorized by the permit will be used for the transmission of electric energy in interstate commerce;
- (3) the proposed construction or modification is consistent with the public interest;
- (4) the proposed construction or modification will significantly reduce transmission congestion in interstate commerce and protects or benefits consumers;
- (5) the proposed construction or modification is consistent with sound national energy policy and will enhance energy independence; and
- (6) the proposed modification will maximize, to the extent reasonable and economical, the transmission capabilities of existing towers or structures. 12

FERC has previously argued that it "cannot adopt an exclusive list of factors or construct a bright-line test to determine whether a project meets all of the statutory criteria." Rather,

¹² 16 U.S.C. §§ 824p(b)(2)-(6).

¹⁰ Order No. 689, Regulations for Filing Applications for Permits to Site Interstate Electric Transmission Facilities, 117 FERC ¶ 61,202 at ¶ 19 (Nov. 16, 2006) [hereinafter "FERC Order No. 689"] (internal citations omitted).

¹¹ *Id.* at ¶ 21.

¹³ FERC Order No. 689, *supra* note 10, at ¶ 41.

according to FERC, projects must be assessed "on a case-by-case basis." ¹⁴ FERC has indicated that it will "balance the public benefits [of a project] against the potential adverse consequences" on "landowners and local communities" but provided little other guidance on its assessment process. ¹⁵

The Sabin Center agrees that a case-by-case assessment of transmission projects is required, but urges FERC to provide additional guidance on how it will approach that assessment. Such guidance would have multiple benefits—for project developers, other stakeholders, and FERC. For project developers, having additional guidance on how FERC will evaluate the criteria in section 216(b)(2)-(6) would reduce uncertainty and enable them to better prepare for federal review of their projects (e.g., by collecting and submitting information that is most useful to FERC). Other stakeholders would, similarly, be better placed to participate effectively in FERC processes if they know how the criteria will be applied. This will, in turn, enable better decision-making by FERC.

Additional guidance on how FERC will evaluate whether a transmission project "is consistent with the public interest" under section 216(b)(3) of the FPA would be especially useful. Section 216(b)(3) of the FPA has not been considered by the courts. However, in interpreting other sections of the FPA with similar language, the courts have held that "the use of the words 'public interest' in a regulatory statute is not a broad license to promote the general public welfare. Rather, the words take meaning from the purposes of the regulatory legislation." The principal purpose of the FPA is to "encourage the orderly development of plentiful supplies of electricity . . . at reasonable prices." The courts have, however, recognized that the FPA also has "other subsidiary purposes" relating to "conservation, environmental, and antitrust" issues. ¹⁸

Consistent with prior court reasoning, in determining whether an interstate transmission project is "consistent with the public interest" under section 216(b)(3) of the FPA, FERC must consider the project's effects on electricity supply and prices, as well as its environmental effects. FERC implicitly recognized this when, in Order No. 689, it said it would consider whether a transmission project results in "unnecessary disruptions to the environment" when deciding whether to issue a permit for it. ¹⁹ While Order No. 689 did not elaborate on what constitutes an "unnecessary disruption to the environment," it appears that FERC's primary concern is with local impacts associated with the construction of transmission facilities. In this regard, in Order 689, FERC stated that it will "consider the adverse effects the proposed facilities will have on landowners and local communities." In addition to these local effects, FERC must also consider the other environmental implications of transmission development, including whether and how it affects greenhouse gas emissions from electricity generation.

In determining whether a transmission project is "consistent with the public interest," FERC must consider how the project will affect the electricity generating mix, and how that, in turn, will affect electricity supply, prices, and environmental outcomes. For example, where a transmission project will connect new renewable generation to load, FERC should consider the project's benefits

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¹⁴ *Id*.

¹⁵ *Id.* at ¶¶ 41-42.

¹⁶ NAACP v. Fed. Power Comm'n, 425 U.S. 662, 669 (1976).

¹⁷ *Id.* at 669-670.

¹⁸ *Id.* at 670 n.6.

¹⁹ Order No. 689 at 42.

²⁰ *Id*.

in terms of diversifying the electricity mix, ²¹ reducing electricity costs, ²² and meeting increased customer demand for renewable energy. ²³ FERC should also consider the greenhouse gas emissions reductions associated with expanding renewable generation. ²⁴ Conversely, where a transmission project connects fossil fuel generation, FERC should consider the potential for increased greenhouse gas emissions. ²⁵ This should be evaluated in light of any relevant federal, state, and local laws and policies aimed at reducing emissions and otherwise addressing climate change. Where such laws and policies exist, there is an increased risk that fossil fuel generation and associated transmission facilities will become stranded assets, which could have major implications for electricity supply and prices.

B. National Environmental Policy Act (NEPA) Reviews of Transmission Projects

1. FERC Should Require Applicants to Disclose the Greenhouse Gas Emissions Effects of Transmission Projects

The Sabin Center recommends that FERC require applicants to provide information about the greenhouse gas emissions effects of transmission projects. As noted in the NOPR, under FERC's existing regulations, applicants are not required to provide any "information on proposed project emissions and the corresponding effects on air quality and the environment." This is despite the fact that numerous studies, including environmental impact statements ("EISs") prepared by other federal agencies, show that transmission projects can result in emissions of greenhouse gases and other air pollutants. To enable it to better assess such emissions, FERC is

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²¹ Electricity generation in the U.S. is dominated by fossil fuels. In 2021, wind generation accounted for just 9.2% of total electricity generation in the U.S., and solar for just 2.6% of generation. Expanding transmission infrastructure is essential to enable greater wind and solar generation and thus diversify the electricity generating mix. For information about the current generating mix, *see* Energy Information Administration, *What is U.S. electricity generation by energy source?* FREQUENTLY ASKED QUESTIONS, https://www.eia.gov/tools/faqs/faq.php?id=427&t=3 (last visited Feb. 20, 2022). For information about the need for new transmission to expand renewable generation, *see* Dep't of Energy, Queued Up . . . But in Need of Transmission (2022), https://www.energy.gov/media/272179.

²² The costs of renewable generation are declining rapidly. For many renewable technologies, costs are already below fossil fuel generation, even without subsidies. *See* Lazard, *Levelized Cost of Energy, Levelized Cost of Storage, and Levelized Cost of Hydrogen*, https://www.lazard.com/perspective/levelized-cost-of-hydrogen/ (last updated Oct. 28, 2021).

²³ There is increasing demand for renewably generated electricity from customers, particularly large industrial customers. *See* Wind Energy Association, Transmission Upgrades & Expansion: Keys to Meeting Large Customer Demand for Renewable Energy (2018), https://acore.org/wp-content/uploads/2020/04/Corporate-Demand-and-Transmission-January-2018.pdf.

²⁴ Lifecycle greenhouse gas emissions from renewable generation are significantly lower than those from fossil fuel generation. Switching from fossil fuel to renewable generation thus reduces greenhouse gas emissions and helps to mitigate climate change. See NREL, Life Cycle Greenhouse Gas Emissions from Electricity Generation: Update (2021), https://www.nrel.gov/docs/fy21osti/80580.pdf.

²⁵ Id

²⁶ FERC NOPR, *supra* note 1, at ¶ 68.

²⁷ See e.g., Dep't of the Interior, Sunzia Southwest Transmission Project Right-of-Way Amendment: Final Environmental Impact Statement 3-158 – 3-164 (2023), https://cdxapps.epa.gov/cdx-enepa-ul/public/action/eis/details?eisId=396685; Dep't of Agriculture, Cardinal-Hickory Creek 345-kV Transmission Line Project: Final Environmental Impact Statement 242 – 246 & 516 – 517 (2019), https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=282834; Dep't of Energy, Final

proposing to require applicants to submit an Air Quality and Environmental Noise Resource Report that "must describe the existing air quality in the project area," and "estimate emissions from the proposed project and the corresponding impacts on air quality and the environment." Specifically, FERC is proposing to require the applicant to "provide the reasonably foreseeable emissions from construction, operation, and maintenance of the proposed facility."

FERC should clarify that the Air Quality and Environmental Noise Resource Report must include an estimate of project-related greenhouse gas emissions, including upstream emissions associated with electricity generation at facilities served by the transmission project. Those emissions are a reasonably foreseeable indirect effect of the project and, as such, must be considered by FERC under NEPA. If a project is expected to lead to a net reduction in greenhouse gas emissions, that should be disclosed as well.

Regulations issued by CEQ under NEPA require federal agencies to consider the "effects" of a proposed action and alternatives thereto, including "indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." CEQ guidance clarifies that "[i]ndirect effects generally include reasonably foreseeable emissions related to a proposed action that are upstream or downstream of the activity resulting from the proposed action." According to CEQ, where a proposed action involves "conveyance of a commodity or resource" (such as electricity), upstream production and downstream use of that resource will generally be "reasonably foreseeable." Thus, any associated emissions must be considered an indirect effect of the proposed action. This has been confirmed in numerous court decisions. As FERC is aware from cases involving its approval of natural gas pipelines, the courts have repeatedly held that additional gas consumption is a reasonably foreseeable consequence of new pipeline development, and thus consumption-related emissions must be considered in FERC's NEPA reviews. The same reasoning applies to transmission development. Indeed, to borrow from the D.C. Circuit Court of Appeal's decision in *Sierra Club v. FERC*, the "entire purpose" of

Northern Pass Transmission Line Project Environmental Impact Statement S-33 – S-34 (2017), https://cdxapps.epa.gov/cdx-enepa-II/public/action/eis/details?eisId=237163; Marcelino Madrigal & Randall Spalding-Fecher, Impacts of Transmission and Distribution Projects on Greenhouse Gas Emissions (2010), http://documents1.worldbank.org/curated/en/677291468331771712/pdf/632150WP0Impac00? Box0361508B0PUBLIC0.pdf.

²⁸ FERC NOPR, *supra* note 1, at ¶ 70.

²⁹ *Id*.

³⁰ 1508.1(g).

³¹ National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196, 1204 (Jan. 9, 2023), https://www.govinfo.gov/content/pkg/FR-2023-01-09/pdf/2023-00158.pdf.

 $^{^{32}}$ *Id*.

³³ See e.g., S. Coast Air Quality Mgmt. Dist. v. Fed. Energy Regulatory Comm'n, 621 F.3d 1085, 1098-1099 (9th Cir. 2010) (upholding FERC's consideration of the impacts of "end-use consumption of . . . gas"); Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d 1357, 1373 (D.C. Cir. 2017) (holding that FERC has authority to consider downstream environmental impacts and "could deny a . . . certificate on the grounds that it would be too harmful to the environment"); Birckhead v. Fed. Energy Regulatory Comm'n, 925 F.3d 510, 519 (D.C. Cir. 2019) (holding that, "in the pipeline certification context, [FERC] does have statutory authority act" on information about downstream environmental impacts); Food & Water Watch v. FERC, No. 20-1132, 2022 WL 727037 (D.C. Cir. Mar. 11, 2022) (holding that FERC was required to consider "the greenhouse-gas emissions attributable to burning the gas to be carried in the pipeline").

developing new transmission is to connect electricity-generating facilities to load centers and thus enable the use of electricity.³⁴ The greenhouse gas emissions associated with electricity generation are, therefore, a "reasonably foreseeable" indirect effect of developing pipeline infrastructure that must be considered by FERC.

Other federal agencies have recognized the need to consider indirect, upstream emissions from electricity generation in NEPA reviews of transmission projects. For example, in the EIS for the SunZia Southwest Transmission project (included as Exhibit A to this letter), the Department of the Interior examined the project's impact on the electricity generating mix and associated greenhouse gas emissions in the Southwest region.³⁵ The EIS noted that the project, which involves development of two 500-kilovolt transmission lines between New Mexico and Arizona, "would provide needed infrastructure to increase transfer capability in areas of potential renewable generation" and "supply up to 4,500 MW of renewable energy." Thus, according to the EIS, "the project . . . would result in an environmental benefit with respect to climate change."³⁷ The EIS further explained that even if just 100 MW of renewable energy was added to the grid, the "annual emission reduction from the potential displacement of fossil fuel-fired electric generating units would be approximately 137,600 [metric tons of carbon dioxide] based on 2019 electric generating and grid data."38 Based on this analysis, the EIS concluded that, "even if only a fraction of the transmission capacity for the project is used to convey renewable energy, the benefits of climate change easily outweigh the additional GHG emissions from construction and operation of the project over the 75-year projected useful life of the project."³⁹ Finally, the EIS explained that the added transmission capacity from the project would "support national goals to transition to carbonfree electricity generation by 2035 and carbon neutrality for the economy as a whole by 2050."40

A similar analysis of upstream (generation-related) greenhouse gas emissions was performed by the Department of Energy in the EIS for the Northern Pass Transmission Line, which was intended to deliver "low-carbon, non-intermittent power . . . from Quebec to southern New England to serve the New England region." The EIS noted that "[t]he electricity provided to the [New England] region from the Project could result in a decrease in the use of fossil fuels for thermal electricity generation." This could, in turn, reduce carbon dioxide emissions from generation in the ISO-NE region by over 10 percent from 2017 levels or up to 2.8 million metric tons annually in 2030. 43

As these examples demonstrate, existing, publicly accessible data and tools can be used to estimate the impact of transmission development on upstream greenhouse gas emissions from electricity generation. 44 FERC should require applicants to include such estimates in their Air

³⁴ Sierra Club, 867 F.3d at 1372.

³⁵ Dep't of the Interior, *supra* note 27.

³⁶ *Id.* at 3-162.

³⁷ *Id*.

³⁸ *Id.* at 3-162.

³⁹ *Id*.

⁴⁰ *Id*.

⁴¹ Dep't of Energy, *supra* note 27, at S-5.

⁴² *Id.* at S-34.

⁴³ *Id*.

⁴⁴ For a fuller discussion of methodologies for quantifying the upstream greenhouse gas emissions effects of transmission projects, *see* Madrigal & Randall Spalding-Fecher, *supra* note 27.

Quality and Environmental Noise Resource Reports. This will enable FERC to accurately assess and disclose the full climate impacts of proposed transmission projects and thus further NEPA's goals of ensuring informed federal decision-making, transparency, and public engagement.

2. FERC Should Require Applicants to Disclose Climate-Related Risks to Transmission Projects

The Sabin Center supports FERC's proposal to require applicants to submit information as part of Resource Report 13 concerning "proposed design and operational measures to avoid or reduce risk, including any measures to ensure that the proposed project facilities would be resilient against future climate change impacts in the project area." This is not sufficient by itself, however. FERC should also require applicants to provide information on the future climate change impacts that are expected to occur in the project area and any associated risks to the project. This is necessary to enable FERC to assess both the environmental impacts of the project and the adequacy of any resilience measures proposed by the applicant.

FERC should also require applicants to provide information about how they assessed climate-related risks and resilience. This information is important to enable FERC to evaluate the adequacy of the applicant's assessment and to identify any gaps or shortcomings that need to be addressed. For example, FERC will need to ensure the applicant's assessment was comprehensive and evaluated the full range of climate change impacts that could reasonably foreseeably affect the project, alternatives, and/or the area(s) in which they take place. FERC must also verify that the applicant's assessment is based on forward-looking, "downscaled" climate projections that reflect anticipated future conditions in the local area. ⁴⁶ It is imperative that the assessment not use historic weather data, which, in the age of climate change, is not an accurate predictor of future conditions. Because the extent of future climate change is uncertain, multiple climate projections reflecting a range of scenarios, including a "worst" case scenario consistent with RCP8.5, should be used. ⁴⁷

There is a legal basis for requiring applicants to submit the information necessary for FERC to adequately analyze climate change risks and resilience. On January 9, 2023, CEQ published interim guidance ("2023 Interim GHG Guidance"), which explicitly directs federal agencies to "consider the ways in which a changing climate may impact the proposed action and its reasonable alternatives, and change the action's environmental effects over the lifetime of those effects." The 2023 Interim GHG Guidance explains as follows:

⁴⁵ 88 Fed. Reg. at 2,791; *see also* FERC NOPR ¶ 81 ("[T]he Commission proposes to add a requirement that Resource Report 13—*Reliability and safety* include a discussion of any proposed measures intended to ensure that the facilities proposed by the applicant would be resilient against future climate change impacts.").

⁴⁶ There are several publicly available sources of downscaled climate data. Examples include: *Energy Data Gallery*, U.S. Climate Resilience Toolkit, https://toolkit.climate.gov/topics/energy/energy-data-gallery (last updated Sept. 24, 2019); *Regional Climate Change Viewer*, U.S. Geological Surv., http://regclim.coas.oregonstate.edu/visualization/rccv/index.html (last visited Aug. 26, 2022); U.S. Bureau of Reclamation et al., Downscaled CMIP3 and CMPI5 Climate and Hydrology Projections, https://gdo-dcp.ucllnl.org/downscaled_cmip_projections/dcpInterface.html (last visited Aug. 26, 2022).

⁴⁷ Representative Concentration Pathways (RCP) describe different pathways of GHG emissions and atmospheric concentrations, air pollutant emissions, and land use through 2100; RCP8.5 is the high baseline emissions scenario.

⁴⁸ 88 Fed. Reg. at 1,200.

Consideration of alternatives provides an agency decision maker the information needed to examine other possible approaches to a particular proposed action (including the no action alternative) that could alter environmental effects or the balance of factors considered in making the decision. Agencies make better informed decisions by . . . evaluating the risks from or resilience to climate change inherent in a proposed action and its design. ⁴⁹

The 2023 Interim GHG Guidance further explains that "[c]limate resilience and adaptation may be particularly relevant to the description of a proposed action, the alternatives analysis, and the description of environmental consequences." The same guidance also provides that "[c]onsidering the effects of climate change on a proposed action, and reasonable alternatives (as well as the no-action alternative), also helps to develop potential mitigation measures to reduce climate risks and promote resilience and adaptation." ⁵¹

For a more detailed explanation of the legal basis for considering climate change impacts on a project and a catalog of relevant government guidance documents, please see Section 4.2 and Appendix 2 of the Sabin Center's February 2022 paper on *Evaluating Climate Risk in NEPA Reviews: Current Practices and Recommendations for Reform*,⁵² which is included as Exhibit B to this letter. As the February 2022 paper explained, "[w]ithout first considering . . . how climate impacts will affect a project and the surrounding environment, agencies cannot possibly hope to make a decision that reflects the most 'beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and intended consequences," within the meaning of 42 U.S.C. § 4331(b)(3), "and are thus at risk of violating their statutory responsibilities" under NEPA.⁵³

Respectfully submitted,

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⁴⁹ *Id.* at 1,203-04.

⁵⁰ *Id.* at 1,208.

⁵¹ *Id.* at 1,209.

⁵² Romany M. Webb et al., Evaluating Climate Risk in NEPA Reviews: Current Practices and Recommendations for Reform, Sabin Center for Climate Change Law, Columbia Law School & Environmental Defense Fund (Feb. 2022), https://scholarship.law.columbia.edu/sabin_climate_change/185.

⁵³ *Id.* at 23.