Pursuant to the Federal Energy Regulatory Commission’s (FERC or the Commission) March 14, 2023 Second Supplemental Notice of Roundtable (the Roundtable), the Institute for Policy Integrity at New York University’s School of Law (Policy Integrity)¹ respectfully submits these comments in the above-captioned proceeding.

Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy. We use economics and law to support smart policies for the environment, public health, and consumers.

This comment letter supplements the testimony given by Albert Huang, Director of Environmental Justice at Policy Integrity, at the Roundtable on Environmental Justice and Equity in Infrastructure Permitting (the “Roundtable”) as a panelist on Panel 3: Identifying, Avoiding, and Addressing Environmental Justice Impacts, and provides additional comments regarding the questions posed to the panels.

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¹ These comments do not reflect the views, if any, of NYU School of Law.
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I. General Comments

Policy Integrity applauds FERC for holding its first-ever Environmental Justice Roundtable and soliciting comments regarding how FERC should consider environmental justice in its energy infrastructure permitting decisions. Although FERC is thinking about all these important issues, to achieve the goals stated by Acting Chairman Phillips at the Roundtable, it is critical that FERC publish a comprehensive environmental justice guidance to which both the Commission and permit applicants will adhere. The guidance should include a systematic and transparent process for conducting environmental justice analyses, including, but not limited to:

- a clear and inclusive definition of an environmental justice community;
- best practices in meaningful engagement with environmental justice communities;
- recommendations on tools and data sources to be used in environmental justice assessments;
- best practices for considering and evaluating cumulative impacts; and
- a methodology for selecting comparison groups and evaluating disproportionate impacts.

FERC’s adoption of a guidance will have the additional dual benefits of properly setting expectations for both the regulated and environmental justice communities, as well as increasing the legal durability of the Commission’s decisions.

The key to FERC successfully considering environmental justice in its decisions, policies and practices is a foundational commitment to engaging with, providing support for, and building trust with environmental justice communities. That commitment means early, frequent, and meaningful engagement with EJ communities at all stages of permitting, including at the time of

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2 Transcript at 4:20-8:14 (statement of Acting Chairman Phillips).
pre-filing. Doing so helps to establish trust and can yield substantive advantages, including assisting in:

- identifying who are potential environmental justice communities affected by a project;
- fully understanding the vulnerabilities that these communities currently face;
- determining whether there may or may not be disproportionate burdens;
- identifying potential cumulative impacts;
- identifying viable alternatives to proposed projects that can mitigate adverse impacts and accurately identifying mitigation for harms from the preferred alternative; and
- gaining public acceptance of and confidence in FERC decisions.

Finally, if FERC’s analysis identifies disproportionate environmental justice impacts, that should guide FERC decisions and provide a basis for denying a project application altogether if alternatives or mitigation cannot address those impacts.

II. FERC Has Broad Authority to Weigh Environmental Justice Impacts in Infrastructure Permitting and Deny Projects Based on Environmental Justice Considerations

During the roundtable, two commissioners suggested that FERC lacks the legal authority to incorporate environmental justice into its permitting decisions. For instance, while Acting Chairman Phillips asserted that “[e]nvironmental justice has always and will be a part of [his] public interest determination,” he also stated that FERC’s “hands are tied” with respect to environmental justice because the Commission is “required” to approve infrastructure projects “that are brought to” it. These statements appear to imply that the Commission lacks authority to

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3 Transcript at 206:21–22 (statement of Chairman Phillips).
4 Id. at 205:23–206:6 (statement of Chairman Phillips). See also id. 19:18–21 (statement of Comm’r Danly) (stating that “you have to build it” if a facility is “really needed by the public”); id. at 206:8–10 (statement of Chairman Phillips) (recommending “encourage[ment]” and “volunteer programs regarding community benefits”).
reject or substantially modify a proposed infrastructure project when there is demand for that project.\(^5\) To the contrary, FERC has broad authority to weigh environmental justice in infrastructure permitting and deny project authorization based on environmental justice considerations under federal laws.

**A. The Natural Gas Act and Federal Power Act Provide Broad Authority to Consider Environmental and Environmental Justice Impacts**

The Commission is not nearly as constrained as the commissioners’ statements imply. To the contrary, suggestions that the Commission must approve natural-gas infrastructure projects regardless of their environmental or environmental-justice impacts overlooks the governing legal standard that underpins the Commission’s broad authority to weigh environmental justice effects in infrastructure permitting. Under both the Natural Gas Act and the Federal Power Act, the Commission must balance a range of factors, including environmental factors, in determining whether and on what conditions to certify proposed projects.\(^6\) Federal courts and the Commission itself has recognized the agency’s broad authority to weigh environmental factors when assessing the public interest under both statutes. Accordingly, as detailed further below, the Commission can reject or substantially modify a proposal if it would harm the environment or burden environmental justice communities.

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\(^5\) Commissioner Phillips’s statements at the roundtable echoed similar comments from Commissioner Christie last year alleging that FERC lacks authority “to reject a project otherwise needed by the public based solely on adverse impacts to environmental interests,” including impacts on “environmental justice communities.” Certification of New Interstate Natural Gas Facilities, 178 FERC ¶ 61,107, at P 11 (2022) (Christie, Comm’r, dissenting) (internal quotation marks omitted). See, e.g., id. at P 16 (Christie, Comm’r, dissenting) (“To construe the Commission’s analysis of the public convenience and necessity as a license to prohibit the development of needed natural gas resources using the public interest language in the [Natural Gas Act] would be to negate the very legislative purpose of the statute.”). This confusion may arise from the Commission’s ongoing failure to robustly assess public need, instead relying almost exclusively on private contracts to find public need.

\(^6\) See, e.g., NAACP v. Fed. Power Comm’n, 425 U.S. 662, 670 & n.6 (1976) (recognizing that “the Commission has authority to consider conservation, environmental, and antitrust questions” under both the Natural Gas Act and the Federal Power Act) (emphasis added).
When permitting natural-gas infrastructure under Section 7 of the Natural Gas Act, for instance, the Commission is authorized to approve applications only for proposed infrastructure that “is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied.” The statute does not further define “public convenience and necessity,” but as the Supreme Court has recognized, this broad language “requires the Commission to evaluate all factors bearing on the public interest.” The Supreme Court has also specifically recognized that this standard provides the Commission with “authority to consider…environmental” factors in certification decisions.

Both federal case law and the Commission’s own policy statements confirm the importance of considering environmental factors as part of the public convenience and necessity balancing. With respect to case law, the D.C. Circuit has specifically recognized that “FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment.” And the Supreme Court has likewise upheld the agency’s assessment of air pollution impacts as part of the public-convenience-and-necessity determination.

With respect to regulatory precedent, Commission statements going back decades reaffirm the agency’s broad authority to weigh environmental factors when implementing its holistic public convenience and necessity standard, and determining whether a project serves the

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7 15 U.S.C. § 717f(e); see also id. § 717f(c)(1)(A). During the roundtable, Commissioner Christie highlighted the use of the word “shall” in the Natural Gas Act to suggest that the Commission must permit proposed infrastructure projects. Transcript 19:20. As this text shows, however, the statute in fact provides that the Commission “shall” deny an application unless it meets “the present or future public convenience and necessity.” 15 U.S.C. § 717f(e).
9 NAACP, 425 U.S. at 670 n.6.
10 Sierra Club v. FERC, 867 F.3d 1357, 1373 (D.C. Cir. 2017).
public interest.12 In its 1999 policy statement, which is still in effect, the Commission explained that “[i]n reaching a final determination on whether a project will be in the public convenience and necessity, the Commission performs a flexible balancing process” that considers “the proposal’s market support, economic, operational, and competitive benefits, and environmental impact.”13 In a 2000 clarifying order, the Commission specifically recognized that “there may be cases in which . . . adverse impacts on . . . the environment are significant enough that the balance would tip against certification.”14 In accord with the weight of judicial precedent and its own policies, the Commission’s must weigh environmental impacts when administering its broad authority under Section 7 of the Natural Gas Act, including those adversely affecting overburdened communities.

The same is true for other Natural Gas Act and Federal Power Act certifications. When assessing applications to construct liquefied natural gas terminals under Section 3 of the Natural Gas Act, the Commission appears to have adopted a standard under which it assesses whether the facility would “be consistent with the public interest,”15 and the D.C. Circuit has remanded a certificate application when the Commission failed to appropriately assess the terminal’s impact on environmental-justice communities.16 Likewise, when assessing applications for the siting of

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12 See, e.g., Order No. 407, Statement of General Policy and Amendments to Section 157.14(a), 44 F.P.C. 47, 49 (1970) (recognizing “air pollution” as a “factor[] in natural gas certificate cases” and providing examples of prior consideration).
16 Vecinos para el Bienestar de la Comunidad Costera v. FERC, 6 F.4th 1321, 1331 (D.C. Cir. 2021) (“The Commission’s determinations of public interest and convenience under the NGA were therefore deficient to the extent that they relied on its NEPA analyses of the projects’ impacts on climate change and environmental justice communities.”). This decision related to both Section 3 and Section 7 of the Natural Gas Act, and supports the Commission’s authority to consider impacts on environmental justice under both provisions. See also Sierra Club v. FERC, 867 F.3d 1357, 1368 (D.C. Cir. 2017) (assessing sufficiency of FERC’s analysis of proposed pipeline on environmental justice communities).
interstate electric transmission facilities under Section 216 of the Federal Power Act, the
Commission must ensure “consistency with the public interest.” And the Supreme Court has
recognized that the Federal Power Act’s references to “public interest” provide the Commission
with “authority to consider . . . environmental” factors in certification decisions.\(^{18}\)

**B. Presidential Executive Orders Mandate the Consideration of Environmental
Justice in Agency Decisions**

Several Presidential Executive Orders call on the Commission to consider the impacts of
its decisions on environmental justice and to integrate those impacts into its permitting decisions.
Although the Commission is not specifically identified as an agency bound by the Executive
Orders discussed in this section, the Commission has stated that it voluntarily\(^ {19}\) follows them as a
“usual practice.”\(^ {20}\) Moreover, because the Commission reviews LNG facilities pursuant to
delegated authority from the Department of Energy – a specified agency under the Executive
Orders mentioned in this section – FERC should comply with the Executive Orders, as well.\(^ {21}\)

Under Executive Order 12898, the federal agencies “shall make achieving environmental
justice part of its mission by identifying and addressing, as appropriate, disproportionately high
and adverse human health or environmental effects of its programs, policies, and activities on
minority populations and low-income populations.”\(^ {22}\) Executive Order 14008 similarly called on

\(^{17}\) 16 U.S.C. § 824p(b)(3). The Commission must also make additional determinations with respect to sound energy
policy and consumer protection, metrics that also require it to make determinations with respect to environmental
justice community impacts.

\(^{18}\) NAACP, 425 U.S. at 670 & n.6.

\(^{19}\) The Commission states that it complies with the relevant EOs and guidance. See Rio Grande LNG, LLC, 183
FERC ¶ 61, 046 at PP 103-04; also see Equity Action Plan at 1 and 8 (January 20, 2022).


\(^{21}\) Like with segmentation in the NEPA context, if delegation invariably allowed agencies to avoid requirements of
the Executive Orders, then agencies might delegate partial authority to avoid conducting the environmental justice
review demanded by the Executive Orders, which is an illogical result.

agencies to “address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities.”

President Biden’s recent order entitled *Revitalizing Our Nation’s Commitment to Environmental Justice for All*, states that agencies “must advance environmental justice for all...by preventing pollution, addressing climate change and its effects, and working to clean up legacy pollution that is harming human health and the environment.” Moreover, the Order added that agencies should “consider adopting or requiring measures to avoid, minimize, or mitigate disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities on communities with environmental justice concerns, to the maximum extent practicable, and to address any contribution of such Federal activities to adverse effects — including cumulative impacts of environmental and other burdens — already experienced by such communities.” These orders give color to what it means for infrastructure to serve the public interest, and FERC must account for those variables in its public interest determinations.

* * *

As these authorities demonstrate, the Commission has both the mandate to balance environmental and environmental justice effects in infrastructure permitting, and broad authority to do so. Accordingly, as set out below, the Commission should issue an environmental justice guidance to better serve applicants and ensure it creates a robust administrative record upon which to make its public interest determinations.

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25 *Id.*; It is notable to acknowledge that the new Order amends the previous Executive Order 12898 by replacing the phrase “disproportionately high and adverse” with “disproportionate and adverse” to eliminate any potential misunderstanding that agencies should only be considering large disproportionate effects.
III. FERC Should Issue an Environmental Justice Guidance to Provide a Clear Understanding for All Parties on How to Identify, Avoid, and Address Environmental Justice Impacts

The Commission should ensure that applicants’ environmental justice reports contain robust environmental justice analyses that appropriately assess impacts on environmental justice communities. To this end, the Commission should adopt a systematic and transparent process for conducting environmental justice analysis, including cumulative impacts assessments, through the publishing of an environmental justice guidance and/or policy statement that provides clear understanding of how FERC will require applicants to conduct assessments in the future, including, but not limited to, the identification methodology and data level it will use, what screening tools it will incorporate, how it will select comparison groups, and its process for evaluating disproportionate impacts.

A. FERC Should Expand the Definition of Environmental Justice Community

FERC’s current definition of “environmental justice community” focuses only on the burden of pollution. For example, the recent Notice of Proposed Rulemaking (“NOPR”), Application for Permits to Site Interstate Electric Transmission Facilities,\(^{26}\) proposes to define “environmental justice community” to mean “any disadvantaged community that has been historically marginalized and overburdened by pollution,” which “include, but may not be limited to, minority populations, low-income populations, or indigenous peoples.”\(^{27}\) The Commission should modify its definition to recognize that an environmental justice community may be overburdened by non-pollution environmental harms or lack equal access to environmental benefits.

\(^{26}\) Application for Permits to Site Interstate Electric Transmission Facilities, 181 FERC ¶ 61205 (2023) [hereinafter NOPR].

\(^{27}\) Id. at 27, 36.
The NOPR’s requirement that all environmental justice communities be overburdened by pollution reflects an unnecessarily narrow understanding of environmental justice. While the NOPR cites to Executive Order 14008 for this definition,\(^{28}\) that document actually refers to “communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, and health care.”\(^{29}\) The Executive Order also states that “[a]gencies shall make achieving environmental justice part of their missions by . . . address[ing] the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities.”\(^{30}\) Accordingly, Executive Order 14008 recognizes that environmental justice encompasses all environmental burdens and underinvestment in environmental benefits.

This more capacious understanding of environmental justice was recently reaffirmed in Executive Order 14096.\(^{31}\) In this April 2023 order, President Biden outlined the many ways that a community might be environmentally overburdened, not all of which involve pollution:

These burdens arise from a number of causes, including inequitable access to clean water, clean air, natural places, and resources for other basic human health and environmental needs; the concentration of pollution, hazardous waste, and toxic exposures; and underinvestment in affordable housing that is safe and healthy and in basic infrastructure and services to support such housing, including safe drinking water and effective sewage management.\(^{32}\)

\(^{28}\) *Id.* at 2774 & n.37.
\(^{30}\) *Id.*
\(^{32}\) *Id.* § 1, 88 Fed. Reg. at 25252.
The Executive Order’s reference to “inequitable access to clean water, clean air, [and] natural places,” underscores that environmental justice is also a question of unequal distribution of environmental goods. As the order states elsewhere, “Achieving this [environmental justice] vision will also require improving equitable access to…all of the benefits provided by nature….“33 Indeed, the executive order provides a definition of “environmental justice” that also reflects this same understanding that environmental justice concerns include non-pollution burdens and lack of access to environmental benefits: “the just treatment and meaningful involvement of all people . . . so that people”: (1) “are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers” and (2) “have equitable access to a healthy, sustainable, and resilient environment.”34

Further, EPA defines “environmental justice” as “[t]he fair treatment and meaningful involvement of all people regardless of race, color, culture, national origin, income, and educational levels with respect to the development, implementation, and enforcement of protective environmental laws, regulations, and policies.”35 EPA then defines “fair treatment” to include “[t]he principle that no group of people . . . should bear a disproportionate share of . . . negative environmental consequences” and further notes that “EPA has expanded the concept of fair treatment to include not only consideration of how burdens are distributed across all populations, but the distribution of benefits as well.”36 Relatedly, EPA defines an “overburdened

33 Id. at 25251.
35 https://www.epa.gov/environmentaljustice/ej-2020-glossary
community” to mean “[m]inority, low-income, tribal, or indigenous populations or geographic locations in the United States that potentially experience disproportionate environmental harms and risks,” which “may be attributable to an accumulation of negative or lack of positive environmental, health, economic, or social conditions within these populations or places.”

Given the more expansive definition of environmental justice articulated in these executive orders and by EPA, FERC should improve its own definition of “environmental justice communities” to reflect the possibility of disproportionate non-pollution environmental burdens (e.g., flooding) and lack of access to environmental benefits (e.g., green space).

B. FERC Should Use Appropriate Census Data to Identify Environmental Justice Communities

FERC’s identification of affected environmental justice populations sets the stage for its impact analysis, as it determines whether the Commission accurately identifies minority and low-income populations. When the Commission does address environmental justice concerns more extensively in its environmental review documents, its analysis has often suffered from methodological shortcomings.

For example, FERC’s identification of environmental justice communities has, until recently, and despite the availability of more granular census block and block group data, used only the larger unit of census tracts when defining environmental justice communities. In order

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37 Id.
to refine analysis to better capture and assess impacts on environmental justice communities, the Commission should use appropriate census data to mitigate the potential that the choice of a geographic unit of analysis does not artificially dilute or mask the presence of people of color and low-income populations. For example, the Commission’s use of census tract data in its certification of the Southeast Market Pipelines Project concealed the presence of a 100% Black census block due to its location in a majority-white census tract. By contrast, using more local, granular data may help the Commission improve its decisionmaking.

Recent authorizations have increasingly used more granular census block group data to identify environmental justice communities, and its Draft Certificate Policy Statement for Section 7 authorizations recognized that the “proper selection of both the geographic unit of analysis (e.g., census block group) within the affected environment and the reference community (e.g., county/parish, or state) is necessary to ensure that affected environmental justice communities are properly identified.” FERC should equally apply this insight to its Section 3 authorizations, and fulfill its commitment to ensuring that the “delineation of the affected area, selected geographic unit of analysis, and reference community are consistent with best practices and federal guidance” by consistently using appropriate census data and comparison groups in whatever approach it chooses for identifying environmental justice populations. Should the Commission fail to do so, subsequent authorizations finding a lack of environmental justice impacts may be particularly susceptible to legal challenge. However, even when it uses block

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41 FERC has issued policy statements discussing its balancing of relevant factors, including both economic and environmental factors. Certification of New Interstate Natural Gas Facilities, 178 FERC ¶ 61,107 at P 89 (2022) (Accession No. 20220218-3034) [hereinafter Draft Updated Certificate Policy Statement].
42 Id. at 90.
43 Vecinos para el Bienestar de la Comunidad Costera v. Fed. Energy Regul. Comm’n, 6 F.4th 1321, 1330–31 (D.C. Cir. 2021) (finding FERC’s environmental justice analysis was deficient for failing to explain why it analyzed only
groups, the Commission does not always analyze all block groups that may experience relevant impacts.\textsuperscript{44} For example, in some instances FERC might find that air quality impacts would likely occur for 30 or more miles from the site of the project, but only analyze environmental justice impacts for one or two miles around the project, without explanation.\textsuperscript{45}

Moreover, FERC should analyze impacts on \textit{all} of the environmental justice communities actually affected by a project, not just those immediately adjacent to it. In a number of authorizations, FERC has analyzed environmental justice impacts only within a one- or two-mile radius of a project, even while recognizing that impacts could extend beyond that range or analyzing other kinds of environmental impacts beyond that range.\textsuperscript{46} The D.C. Circuit rejected this practice in \textit{Vecinos}, finding FERC’s selection of a narrow two-mile radius arbitrary when the proposed facility would have air-quality impacts beyond that range.\textsuperscript{47} To conduct a truly comprehensive environmental justice analysis, the Commission should analyze the effects on all of the environmental justice communities within the geographic range of an identified impact. At minimum, where FERC chooses to analyze only a narrow radius, it should fully explain any discrepancies between the geographic scope of expected effects and its range of analysis.

\textbf{C. FERC Should Require Applicants to Employ One or More Supplementary Tools That Include Environmental Indicators When Identifying Environmental Justice Communities}

FERC’s methodology for identifying environmental justice communities (its instructions on how to operationalize FERC’s definition of “environmental justice communities”) specifies census blocks within two miles of the project site when environmental effects from the projects would extend well beyond that range); see also, c.f. Comments of W. Env’t L. Ctr. et al., at 58–59, Draft EA and FONSI for the Double E Pipeline, Double E Pipeline, LLC, Docket No. CP19-495 (Apr. 23, 2020) (Accession No. 20200424-5012)[hereinafter referred to as WELC Double E Comments].

\textsuperscript{44} \textit{Id.}

\textsuperscript{45} \textit{Vecinos para el Bienestar de la Comunidad Costera}, 6 F.4th at 1330–31.

\textsuperscript{46} \textit{Id.}; WELC Double E Comments, \textit{supra} note 42, at 58–59.

\textsuperscript{47} Vecinos para el Bienestar de la Comunidad Costera, 6 F.4th at 1330–31.
that applicants should use it when identifying these communities in their environmental justice and alternatives reports. 48 Under FERC’s approach, a census block group qualifies if more than 50% of the population of the block group is minorities; the minority population of the block group is at least 10% higher than the minority population of the county (e.g., if the county has a minority population of 40%, the block group would need to have a minority population of 44% or greater); or the percentage of low-income people in the block group is greater than or equal to that of the county. 49

By using income and race as the only proxies for historical marginalization and pollution burden, FERC’s methodology omits certain disadvantaged communities that should satisfy FERC’s proposed definition of an environmental justice community. FERC’s current methodology would miss an even greater number of environmental justice communities that must be included under an appropriately broadened definition. For this reason, the Commission should require applicants to supplement FERC’s demographics-only methodology with one or more screening tools that incorporate additional proxies, such as proximity to pollution. The Commission should consider the supplemental screening tools described below, with consideration towards our non-exhaustive descriptions of their strengths and weaknesses. Also, irrespective of which combination of screening tools FERC ultimately selects and whether FERC corrects its definition of “environmental justice community,” the Commission should establish a mechanism for communities to self-identify as environmental justice communities.

1. Environmental Justice Screening and Mapping Tool

The Environmental Justice Screening and Mapping Tool (EJScreen) is EPA’s environmental justice mapping tool that allows users to visualize environmental indicators,

48 NOPR, supra note 28, at P 30 & n.40, P 65 & n.79.
49 Id. at 30 n.39.
socioeconomic indicators, and combinations of the two. The 12 environmental indicators are (1) annual average PM$_{2.5}$, (2) average summer ozone, (3) diesel particulate matter, (4) lifetime air toxics cancer risk, (5) air toxics respiratory hazard index (i.e., the ratio of exposure concentration to a health-based reference concentration), (6) annual average daily traffic, (7) lead paint as indicated by the percentage of houses built before 1960, (8) proximity to superfund sites, (9) proximity to sites with chemical-accident-management plans, (10) proximity to hazardous-waste facilities, (11) proximity to underground storage tanks and leaking underground storage tanks, and (12) concentrations of toxics from wastewater discharge.

EJScreen takes these dozen environmental indicators, and transforms them into a dozen EJ Indexes that attend to environmental justice and could allow applicants to identify environmental justice communities. First, for each block group, EJScreen computes a score for every environmental indicator that reflect exposure or proximity that environmental burden, relative to other block groups. For example, a block group’s PM$_{2.5}$ indicator is a percentile from 0% to 100% that captures how the raw value of the ambient PM$_{2.5}$ compares to the raw values in other block groups, such that the median block group for each indicator receives a percentile of 50%. Then, for each environmental indicator score, EJScreen multiplies the block group’s percentile for that indicator by the average of the percentages of people of color and low-income people in that block group to get a “raw” EJ Index score for that indicator. The raw score is not the final EJ Index: Raw scores are then converted into a percentile relative to other block groups.

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52 Id. at 29–30.
53 Id. at 29.
54 Id. at 31.
55 Id. at 29.
which is value ultimately displayed in EJScreen. If a block group has an EJ Index at the 80th percentile for PM$_{2.5}$, the product of the block group’s environmental indicator percentile for PM$_{2.5}$ multiplied by the average of the percentages of people of color and low-income people is greater than the corresponding products for 79% of block groups.

EJScreen also calculates a dozen Supplemental Indexes, which, like the EJ Indexes, also capture a combination of socioeconomic and environmental data to quantify environmental justice concerns. The difference between the Supplemental Indexes and the EJ Indexes is that, instead of using the average of the percentages of people of color and low-income people, the Supplemental Indexes use the average of four socioeconomic indicators and one health indicator. These five indicators are the percentages of people who are low income, unemployed, speak limited English, have less than a high school education, and have a low life expectancy. If a block group has a Supplemental Index at the 80th percentile for PM$_{2.5}$, the product of the block group’s environmental indicator percentile for PM$_{2.5}$ multiplied by the average of the aforementioned five indicators is greater than the corresponding products for 79% of block groups.

A strength of EJScreen is how it uses a combination of environmental factors (all of which relate to pollution) and socioeconomic factors. This approach would identify communities that satisfy FERC’s proposed definition of “environmental justice community” (which is focused on historical marginalization combined with pollution burden) but that are missed by the Commission’s current screening methodology, even if FERC does not broaden the definition. Further, the simultaneous availability of the EJ Indexes and the Supplemental Indexes provides

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56 Id. at 30.
57 Id.
58 Id.
Helpfully, EJScreen also identifies communities at the block-group level, a relatively small unit (usually containing between 600 to 3,000 people) that matches the unit of analysis for FERC’s existing methodology. Using this relatively granular unit of geographic analysis reduces the likelihood that the presence of environmental justice communities would be masked by surrounding communities with different demographic characteristics or environmental burdens.

A weakness of EJScreen is that it includes only a limited set of environmental metrics, i.e., the 12 environmental indicators. A community may face disproportionate environmental burdens that are not captured by the tool, such as drinking-water quality or landscape degradation. Further, for certain air quality indicators, EJScreen uses data from census tracts, a larger unit of analysis that generally contains 1,200 to 8,000 people. For these indicators, the tool assigns the same value to all block groups that comprise the tract, reducing the block-group-level accuracy for these metrics. Perhaps most significantly for FERC’s purposes, EJScreen neither provides an overall environmental justice score for each block group nor a threshold beyond which communities should be considered environmental justice communities for the 24 indexes. Instead, each block group receives 12 EJ Index scores and 12 Supplemental Index

59 See id. at 29.
60 Glossary, Census Bureau, https://perma.cc/ELZ8-FK6R.
64 Glossary, Census Bureau, https://perma.cc/ELZ8-FK6R.
66 Darya Minovi, The Promise of Environmental Justice Screening Tools in Maryland and Beyond, Ctr. for Progressive Reform (Apr. 20, 2021), https://perma.cc/TJA3-GTGV.
scores (one of each for each environmental indicator), and no block groups are specifically labeled environmental justice communities. If FERC were to adopt EJScreen, it would need to choose one or more conditions that, when satisfied, would cause a block group to be labeled an environmental justice community.

For example, FERC might pick a percentile threshold and declare that any block group that exceeds this threshold for any of the dozen EJ Indexes qualifies as an environmental justice community. Doing so would improve FERC’s methodology by adding environmental proxies while maintaining the Commission’s existing focus on race and income, which are the two socioeconomic factors that feed into the EJ Indexes. The figure below illustrates the block groups that satisfy EJ Index score threshold of 80% and that are not identified by FERC’s current demographics-only methodology. EPA has advised that a score at or above the 80th percentile in any EJ Index signals that a community “should be considered as a potential candidate for further review.”67 If an 80% threshold were chosen (i.e., a block group is an environmental justice community if it scores at or above the 80th percentile for any of the 12 EJ Indexes), EJScreen would identify 2,100 block groups that the Commission’s current approach misses. As a point of reference, FERC’s existing methodology identifies 151,537 + 2,100 block groups. If a more inclusive 70% threshold or a more stringent 90% threshold were used, the number of block groups overlooked by FERC’s current demographics-only approach would be 11,884 and 10 block groups, respectively.

67 EJSCREEN TECHNICAL DOCUMENTATION, supra note 53, at 34; but see id. at 35 (“The 80th percentile filter in EJScreen is not intended to designate an area as an ‘EJ community.’ EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns.”).
Figure 1: Additional 2,100 Block Groups Identified under 80% EJ Index Standard

Figure 2: Additional 11,884 Block Groups Identified under 70% EJ Index Standard

Figure 1: Additional 10 Block Groups Identified under 90% EJ Index Standard

Alternatively, FERC could pick a percentile threshold for the dozen Supplemental Indexes, rather than the EJ Indexes. An advantage of this approach is that the Supplemental
Indexes rely on different socioeconomic indicators of vulnerability than FERC’s current methodology: unemployment, English ability, education, and life expectancy. (The one exception is income, which is used for both the Supplemental Indexes and FERC’s demographics-only methodology.) Compared to using the EJ Indexes as the supplemental metric, this reduced redundancy leads to the identification of more historically marginalized and environmentally overburdened block groups that are missed under FERC’s current methodology. At the 80% threshold, the Supplemental Index approach identifies an additional 6,266 block groups that are not among the 151,537 identified under FERC’s demographics-only methodology. At the 70% and 90% thresholds, an additional 20,816, and 584 block groups are identified, respectively, beyond the 151,537 block groups.

Figure 4: Additional 6,266 Block Groups Identified under 80% Supplemental Index Standard
Yet another approach would be for FERC to look at the 12 EJ Indexes and the 12 Supplemental Indexes. The Commission could pick a threshold (e.g., 80%), and state that any block group that exceeds this threshold for any of the 24 indexes qualifies as an environmental justice community.

Finally, EPA does not use EJScreen to label block groups as environmental justice communities,68 but EPA’s practice need not be dispositive for FERC. The Commission would not be using the tool in isolation, only to supplement its existing demographics-only methodology. Although EPA uses EJScreen as “a useful first step in understanding or highlighting locations that may be candidates for further review,”69 FERC might place special weight on the need for an administrable standard for the Commission and applicants to use without causing undue delay. Finally, if FERC were to accept the recommendation below that communities be given a mechanism to self-identify as environmental justice communities, this

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68 https://www.epa.gov/ejscreen/how-does-eapa-use-ejscreen
possibility would help address the critique that affected communities, not federal agencies, should be the ones to bestow these labels.\textsuperscript{70}

2. Climate & Economic Justice Screening Tool

In Executive Order 14008, President Biden announced “the policy of [his] Administration to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment.”\textsuperscript{71} The order further directed CEQ to develop the Climate & Economic Justice Screening Tool (CEJST) to identify these so-called “disadvantaged communities.”\textsuperscript{72} The White House has since instructed agencies to use CEJST to the maximum extent possible to identify disadvantaged communities for the Justice40 Initiative, which aims to deliver 40\% of benefits from certain investments to disadvantaged communities.\textsuperscript{73} Relevant here, the White House also requests that agencies “encourage use of…CEJST” in order “to promote uniformity across the government” with regard to “the identification of communities that are disadvantaged, marginalized, overburdened, and underserved.”\textsuperscript{74}

CEJST identifies census tracts as “disadvantaged” if they (1) meet certain thresholds in at least one of the tool’s eight categories of burden; (2) are completely surrounded by disadvantaged tracts and are at or above the 50\textsuperscript{th} percentile for low income; or (3) are on land within the boundaries of a federally recognized Indian tribe.\textsuperscript{75} The eight categories of burden are climate change, energy, health, housing, legacy pollution, transportation, waste and wastewater,

\footnotesize{\textsuperscript{70} See https://progressivereform.org/cpr-blog/promise-environmental-justice-screening-tools-maryland-and-beyond/ (“The decision to use the ‘EJ community’ identifier should be up to members of the affected community.”).


\textsuperscript{72} Id. § 222(a), 86 Fed. Reg. 7619, 7631.

\textsuperscript{73} Memorandum from Shalanda D. Young, Director, Off. of Mgmt. & Budget, et al. to the Heads of Executive Departments and Agencies 1–2, M-23-09 (Jan. 27, 2023), https://perma.cc/NQ7V-5CW6.

\textsuperscript{74} Id. at 2 n.1.

\textsuperscript{75} Methodology, COUNCIL ON ENV’T QUALITY, https://perma.cc/ND9H-6PS6.}
and workforce development.\textsuperscript{76} To qualify as burdened under one of these eight categories, a tract must satisfy certain combinations of thresholds, typically a combination of environmental and socioeconomic conditions (excluding race):

- **Climate Change**: (1) At or above the 90\textsuperscript{th} percentile for expected agriculture loss rate, expected building loss rate, expected population loss rate, projected flood risk, \textit{or} projected wildfire risk \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Energy**: (1) At or above the 90\textsuperscript{th} percentile for energy cost \textit{or} PM\textsubscript{2.5} in the air \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Health**: (1) At or above the 90\textsuperscript{th} percentile for asthma, diabetes, heart disease, \textit{or} low life expectancy \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Housing**: (1) At or above the 90\textsuperscript{th} percentile for housing cost, lack of green space, lack of indoor plumbing, \textit{or} lead paint \textit{or} experienced historic underinvestment based on redlining maps created by the federal government’s Home Owners’ Loan Corporation between 1935 and 1940 \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Legacy Pollution**: At or above the 90\textsuperscript{th} percentile for proximity to hazardous waste facilities, proximity to Superfund sites, \textit{or} proximity to Risk Management Plan facilities \textit{or} have at least one abandoned mine land \textit{or} have at least one Formerly Used Defense Site \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Transportation**: (1) At or above the 90\textsuperscript{th} percentile for diesel particulate matter exposure, transportation barriers, \textit{or} traffic proximity and volume \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Water and Wastewater**: (1) At or above the 90\textsuperscript{th} percentile for underground storage tanks and releases \textit{or} wastewater discharge \textit{and} (2) at or above the 65\textsuperscript{th} percentile for low income.

- **Workforce Development**: (1) At or above the 90\textsuperscript{th} percentile for linguistic isolation, low median income, poverty, \textit{or} unemployment \textit{and} (2) less than 10\% of people ages twenty-five or older have a high school education.\textsuperscript{77}

\textsuperscript{76} Id.
\textsuperscript{77} Id.
Using the tool, it is possible to see exactly which combination of circumstances causes a tract to be labeled as disadvantaged, as well as whether more than one set of conditions has been satisfied.\textsuperscript{78}

An advantage of supplementing FERC’s current methodology with CEJST is that (like EJScreen) it combines environmental and socioeconomic proxies for marginalization and environmental burden, which would bring the Commission’s methodology into better alignment with the NOPR’s proposed definition of “environmental justice communities.”\textsuperscript{79} And, because CEJST also incorporates certain non-pollution environmental harms and lack of access to some environmental benefits, the tool would be especially valuable for identifying environmental justice communities if FERC were to adopt our proposed broader definition. Additionally, by including all land within the boundaries of federally recognized Indian tribes, CEJST accords with the proposed definition’s attention to indigenous peoples. Compared to EJScreen, CEJST accounts for a wider variety of indicators (e.g., vulnerability to climate change, asthma, lack of green space) that capture more of the ways that a community could be marginalized or environmentally overburdened. Perhaps most importantly, CEQ has already selected the thresholds within CEJST that dictate when a community qualifies as disadvantaged, which would relieve FERC from independently needing to select thresholds.

Environmental justice advocates commonly critique CEJST because it does not use race as a socioeconomic indicator;\textsuperscript{80} however, that issue may be less relevant here because FERC’s


\textsuperscript{79} Policy Integrity’s proposed expanded definition of environmental justice community would require this as well.

\textsuperscript{80} E.g., Robert D. Bullard et al., Comments on the CEQ’s Climate and Economic Justice Screening Tool (Apr. 22, 2022), https://perma.cc/3ODA-VU49 (“It is not clear why race is not being considered since decades of statistical studies . . . show that race has an independent effect on the distribution of environmental burdens from other socioeconomic factors and is indeed the most potent and consistent predictor of where pollution and other environmental burdens are concentrated.”).
current methodology already includes race and we are recommending additional metrics. In other word, CEJST would only supplement that approach. As with EJScreen, CEJST does not provide any overall metric of cumulative burden,\(^{81}\) although CEQ suggests that agencies might consider how many different ways that a community qualifies as disadvantaged.\(^{82}\) Nor does CEJST capture all conceivable environmental burdens, only those outlined above. Finally, instead of census block groups, CEJST uses census tracts, a relatively large unit of analysis that may mask the existence of smaller environmental justice communities within tracts that are not identified as disadvantaged.\(^{83}\) For the same reason, CEJST provides no guidance on which areas within a disadvantaged tract are most burdened.

There are multiple ways that FERC can use CEJST as a supplemental tool. The simplest option would be for the Commission to declare that census tracts identified as disadvantaged by CEJST (or the constituent block groups of these tracts) are environmental justice communities. While many census tracts identified as disadvantaged by CEJST contain one or more of the 151,537 block groups identified by FERC’s existing demographics-only methodology, adopting the CEJST supplemental methodology would in effect capture an additional 8,190 block groups that may satisfy our proposed broader definition of “environmental justice community.”

\(^{81}\) Rajat Shrestha et al., CEQ’s Climate and Economic Justice Screening Tool Needs to Consider How Burdens Add Up, WORLD RES. INST. (Mar. 15, 2023), https://perma.cc/YF4W-3M4G.

\(^{82}\) COUNCIL ON ENV’T QUALITY, INSTRUCTIONS TO FEDERAL AGENCIES ON USING THE CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL 5 (2023), https://perma.cc/XX5W-GQWV.

\(^{83}\) MAKING REGULATIONS FAIR, supra note 63, at 6–7.
Alternatively, if FERC were to maintain its proposed (and inaccurately narrow) definition of “environmental justice community,” the Commission might use CEJST but look at only certain categories of burdens (i.e., those that focus on pollution) that that FERC considers to be most relevant to its proposed definition. The Commission could also select its own burden thresholds within the data categories that CEJST reports, instead of using CEQ’s thresholds.

3. State Tools

Some states have developed their own environmental justice mapping tools. These tools differ from one another across many dimensions, including: which indicators they include (and whether they include any environmental indicators), whether they combine indicators into one or more composite indexes, and whether any thresholds are used to identify environmental justice communities. For example, California’s CalEnviroScreen provides census tracts with an overall CalEnviroScreen Score that equals the product of a Pollution Burden score multiplied by

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a Population Characteristics score. The tracts with the highest 25% of scores are labeled as disadvantaged for purposes of receiving proceeds from the state’s cap-and-trade program.

The advantages and drawbacks of each of the myriad state mapping tools are beyond the scope of these comments. And, because these tools are geographically limited to single states, it would be impossible to identify all of the environmental justice communities affected by an interstate project using only one state’s tool. Still, as FERC considers how to supplement its existing methodology, it should weigh whether it would appropriate to use these state tools in addition to or in lieu of EJScreen and CEJST, particularly in cases where FERC’s backstop siting arises against an existing state administrative record for the project.

4. Self-Identification Mechanism

Although screening tools are helpful in identifying communities facing intersecting environmental, racial, economic, and health burdens, no tool can comprehensively reflect the circumstances of any given community, especially when data is systematically lacking or communities face burdens that cannot be easily quantified. Measurement inaccuracies, especially in areas with smaller populations, may not reflect local-level realities if taken at face value. As such, data screening tools should not be the final arbiter of whether an applicant or

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87 SB 535 DISADVANTAGED COMMUNITIES, CA, OFF. OF ENV’T HEALTH HAZARD ASSESSMENT, https://oehha.ca.gov/calenviroscreen/sb535 (last visited May 1, 2023). Tracts are also labeled as disadvantaged if they were “previously identified in the top 25% in CalEnviroScreen 3.0,” have “high amounts of pollution and low populations” or are “federally recognized tribal areas as identified by the Census in the 2021 American Indian Areas Related National Geodatabase.” SB 535 DISADVANTAGED COMMUNITIES (2022 UPDATE), CA, ENV’T PROT. AGENCY, https://experience.arcgis.com/experience/1c21c535da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/ (last visited May 1, 2023).
FERC identifies a community as falling within a circumscribed regulatory definition of an environmental justice community. Instead, FERC should consider allowing communities to self-identify as an environmental justice community, as the innovative Illinois Solar for All initiative does.\footnote{See 20 Ill. Comp. Stat. Ann. 3855/1-56.} The Solar for All program allows communities to use a variety of data sources to demonstrate eligibility, including expert testimony, community organizing, and news articles.\footnote{ILSFA Environmental Justice Community Self-Designation Application, I.L.L. POWER AGENCY, https://www.illinoissfa.com/designate-your-community/ (last visited May 1, 2023).} Historical events are also eligible data sources, which is important given that many existing screening tools are limited in their ability to assess prior environmental damage. Allowing communities to self-identify, or, at the very least, to petition for their designations, ensures that communities are not excluded because the existing identification tools or methods are unable to capture localized harms.

This could mean establishing a procedure in which communities could petition FERC to be considered environmental justice communities, notwithstanding the fact that they would not be identified as such using the Commission’s chosen methodology or blend of tools. FERC can clearly provide a process for communities to self-identify by signaling this opportunity in its existing notice requirements.\footnote{See NOPR, supra note 28, at 28–29.} For example, a community might submit evidence that census boundaries do not accurately demarcate the community’s borders and that, if the correct boundary line were used, the community would in fact satisfy FERC’s criteria. Or a community might submit evidence of a disproportionate environmental burden that is not reflected in whatever screening tools that FERC adopts. It would be most appropriate for FERC, not the applicant, to adjudicate whether a community should be considered an environmental justice
community in light of the submitted evidence. Casting the Commission’s net broadly early in the siting process can help transmission get built by ensuring that such communities are identified or have the option to self-identify, and thus the resulting opportunity to engage with both the applicant and FERC.

D. FERC Should Provide Guidance on How to Conduct a Cumulative Impacts Analyses

Given the recurring problems with FERC’s own treatment of cumulative impacts,94 additional guidance for applicants is necessary to ensure that this aspect of the environmental justice and alternatives reports does not become a mere box-checking exercise for applicants.

1. FERC should define key terms.

A first step would be for FERC to adopt EPA’s Office of Research and Development’s (EPA ORD) definitions of “cumulative impacts,” “cumulative impact analysis,” and “stressor” and to specifically require that applicants perform a “cumulative impact assessment”:

- Cumulative Impacts are defined as the totality of exposures to combinations of chemical and nonchemical stressors and their effects on health, well-being, and quality of life outcomes. Cumulative impacts include contemporary exposures to multiple stressors as well as exposures throughout a person’s lifetime. They are influenced by the distribution of stressors and encompass both direct and indirect effects to people through impacts on resources and the environment. Cumulative impacts can be considered in the context of individuals, geographically defined communities, or definable population groups. Cumulative impacts characterize the potential state of vulnerability or resilience of a community.95

- Cumulative Impact Assessment is defined as a process of evaluating both quantitative and qualitative data representing cumulative impacts to inform a decision. Cumulative impact assessment requires a systematic approach to characterize the combined effects from exposures to both chemical and non-chemical stressors over time across the affected

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95 ENV’T PROT. AGENCY OFF. OF RSCH. & DEV., CUMULATIVE IMPACTS RESEARCH: RECOMMENDATIONS FOR EPA’S OFFICE OF RESEARCH AND DEVELOPMENT 4–5 (2022) [hereinafter EPA ORD CUMULATIVE IMPACTS RECOMMENDATIONS], https://perma.cc/9BE8-TAB2; see also id. at 5 nn.5–7 (defining “health,” “well-being,” and “quality of life”).
population group or community. It evaluates how stressors from the built, natural, and social environments affect groups of people in both positive and negative ways. The posited elements of a cumulative impact assessment include community role throughout the assessment, such as identifying problems and potential intervention decision points to improve community health and well-being; combined impacts across multiple chemical and non-chemical stressors; multiple sources of stressors from the built, natural, and social environments; multiple exposure pathways across media; community vulnerability, sensitivity, adaptability, and resilience; exposures to stressors in the relevant past and future, especially during vulnerable lifestages; distribution of environmental burdens and benefits; individual variability and behaviors; health and well-being benefits/mitigating factors; uncertainty and variability associated with the data and information; and an approach for how to integrate data and information to assess cumulative impacts.  

- Stressors are defined as any physical, chemical, social, or biological entity that can induce a change (either positive or negative) in health, well-being, and quality of life (either now or into the future). Chemical stressors are defined as exogenous environmental compounds. Chemical stressors change or damage living organisms or ecosystems and are released into the environment by waste, emissions, pesticide use, or uses of formulated compounds like pharmaceuticals. Non-chemical stressors are factors found in the built, natural, and social environments including physical factors such as noise, temperature, and humidity and psychosocial factors (e.g., poor diet, smoking, and illicit drug use).

EPA ORD developed these definitions through research into previous definitions, workshops and listening sessions, internal discussions, and input from EPA’s Science Advisory Board. Adopting them would provide greater clarity as to the scope and depth of the required cumulative-impacts analysis while increasing the likelihood that applicants accurately assess cumulative impacts to environmental justice communities from proposed projects and their alternatives, to provide FERC with a sound basis on which to conduct its own public interest analysis.

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96 Id. at 5.
97 Id. at 1 n.3.
98 Id. at 1 n.1.
99 Id.
100 Id. at 1 n.2.
101 Id. at 4.
2. **FERC should identify authoritative resources or principles.**

FERC should also direct applicants to specific sources of federal guidance outlining how to conduct a cumulative-impacts analysis, or the Commission should distill the lessons from these documents and write its own guidelines to ensure that it has a robust and legally defensible administrative record on which to base its permitting decisions. Below we review several existing tools that FERC could direct applicants to deploy in conducting legally sufficient cumulative impacts analyses.102

EPA ORD’s *Cumulative Impacts Research: Recommendations for EPA’s Office of Research and Development* lists key questions for the development of a cumulative-impacts analysis, including “What is the baseline condition for the identified population/community? This should include socioeconomic, environmental, and health data as available, including information on pre-existing vulnerabilities and historical exposures.”; “What are the impacts (positive or negative) of the decision?”; and “Does the decision increase or decrease identified racial/ethnic and income gaps in health and environmental impacts/risks? If so, how much?”103

EPA’s *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* addresses the simultaneous need to assess how environmental justice communities already face higher exposures to given environmental stressors and how members of these communities may also be more susceptible to adverse outcomes given vulnerabilities caused by other stressors.104

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102 While NEPA requires cumulative impacts analyses, 40 C.F.R. § 1508.1(g)(3), Section 216’s obligation runs to FERC to ensure that it is only permitting projects consistent with the public interest. FERC cannot make such a determination for a transmission project without examining cumulative impacts.

103 *Id.* at 10–11.

Most comprehensively, EPA’s *Framework for Cumulative Risk Assessment* provides a detailed walkthrough of the three main phases of a cumulative-risk assessment: planning, scoping, and problem formulation; analysis; and risk characterization.\(^{105}\) In brief:

In the first phase, a team of risk managers, risk assessors, and other stakeholders establishes the goals, breadth, depth, and focus of the assessment. The end products of this phase are a conceptual model and an analysis plan. The conceptual model establishes the stressors to be evaluated, the health or environmental effects to be evaluated, and the relationships among various stressor exposures and potential effects. The analysis plan lays out the data needed, the approach to be taken, and the types of results expected during the analysis phase.

The analysis phase includes developing profiles of exposure, considering interactions (if any) among stressors, and predicting risks to the population or populations assessed. It is in this phase that difficult technical issues such as the toxicity of mixtures, the vulnerability of populations, or the interactions among stressors that may be chemical or nonchemical are addressed and, hopefully resolved. The end product of this phase is an analysis of the risks associated with the multiple stressors to which the study population or populations are exposed.

The third phase, risk characterization (interpretation), puts the risk estimates into perspective in terms of their significance, the reliability of the estimates, and the overall confidence in the assessment. It is also in this phase that an evaluation is made of whether the assessment met the objectives and goals set forth in phase one.\(^{106}\)

Although there are subtle distinctions between cumulative-risk assessment and cumulative-impacts analysis,\(^ {107}\) EPA nonetheless advises that this document “provides guidance on planning and undertaking an assessment of cumulative impacts when evaluating the range of both chemical and non-chemical stressors that may be relevant to potential EJ concerns.”\(^ {108}\) FERC should consider instructing applicants to use these guidelines, or provide its own.

\(^{105}\) ENV’T PROT. AGENCY, FRAMEWORK FOR CUMULATIVE RISK ASSESSMENT 14–71 (2003), [https://perma.cc/64W7-T6HL](https://perma.cc/64W7-T6HL).

\(^{106}\) Id. at 18.

\(^{107}\) EPA ORD CUMULATIVE IMPACTS RECOMMENDATIONS, supra note 102 95, at viii; see also ENV’T PROT. AGENCY SCI. ADVISORY BD., CONSULTATION ON CUMULATIVE IMPACTS ASSESSMENTS (2022), [https://sab.epa.gov/ords/sab/f?p=100:18:9230939263227:::RP,18:P18_ID:2615#doc](https://sab.epa.gov/ords/sab/f?p=100:18:9230939263227:::RP,18:P18_ID:2615#doc) (last visited May 1, 2023) (scroll to “Final Report(s)”) (containing each member of the Science Advisory Board’s answers to question 2 about the distinction between cumulative impact assessment and cumulative risk assessment).

\(^{108}\) EPA EJ TECHNICAL GUIDANCE, supra note 112, at 18.
3. **Sub-National Ambient Air Quality Standards air pollution impacts should be considered.**

Finally, FERC should explicitly delineate that cumulative-impacts analyses include increased exposure to criteria pollutants (i.e., PM, ozone, carbon monoxide, lead, SO₂, and NOₓ), even when total emissions remain below the Clean Air Act’s National Ambient Air Quality Standards (NAAQS). The Commission has used overall compliance with NAAQS to disregard projects’ air-pollution impacts. Although the D.C. Circuit declined to set aside a previous NEPA analysis from FERC that employed this reasoning, this approach is far from a best practice and conflicts with how EPA treats changes in emissions levels below the NAAQS.

EPA has consistently recognized that criteria pollutants are non-threshold pollutants, meaning there is no safe level of exposure. Further, under administrations of both parties, EPA has calculated the potential health benefits of sub-NAAQS reductions in criteria pollutants.

For example, in EPA’s final regulatory impact analysis for the Mercury and Air Toxics Standards in 2011, EPA stated that “[i]t is important to emphasize that NAAQS are not set at a level of zero risk” and “[a] large fraction of the PM2.5-related benefits associated with this rule occur below the level of the [NAAQS].” Sub-NAAQS changes in criteria pollutants are especially

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109 *E.g.*, *Rio Grande LNG, LLC*, 183 FERC ¶ 61046, at PP 151 (2023) (“Both the Texas LNG and Rio Grande LNG Terminals would be in compliance with the NAAQS during operations and NAAQS are designated to protect sensitive populations. The operation of the LNG terminal projects when combined with the other projects within the cumulative geographic scope for air quality would not cause or contribute to a potential exceedance of the NAAQS on a regional or localized basis, and therefore would not result in significant adverse air quality impacts on environmental justice communities in the region.”) (footnotes omitted)).

110 *Sierra Club*, 867 F.3d at 1370 n.7. Moreover, since the FPA itself requires an “all factors bearing on the public interest” approach, such failures may violate the FPA itself, notwithstanding NEPA’s disclosure requirements.


112 *Id.* at 1391.

113 *Id.* at 1391–40.

significant for certain sensitive populations that may be more prevalent in environmental justice communities, such as children with asthma. Any cumulative-impacts analysis should seriously consider the health impacts that environmental justice communities will face under higher levels of criteria pollutants (including from power-system emissions impacts) that do not exceed the NAAQS.

IV. Conclusion

The Commission has broad authority to weigh environmental justice impacts in its infrastructure permitting and deny projects based on environmental justice considerations. To accomplish this, it is critical that the Commission publish a comprehensive environmental justice guidance to which both the Commission and permit applicants will adhere. The Commission’s adoption of a guidance will have the dual benefits of properly setting expectations for both the regulated and environmental justice communities, as well as increasing the legal durability of the Commission’s decisions.

Finally, if FERC’s analysis identifies disproportionate environmental justice impacts, that should guide FERC decisions and provide a basis for denying a project application altogether if alternatives or mitigation cannot address those impacts.

115 LNG PUBLIC INTEREST REVIEW, supra note 101, at 48.
Respectfully Submitted,

/s/ Al Huang  
Albert Huang  
Environmental Justice Director  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
al.huang@nyu.edu

/s/ Matthew Lifson  
Matthew Lifson  
Legal Fellow  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
matthew.lifson@nyu.edu

/s/ Hiroshi Matsushima  
Hiroshi Matsushima, Ph.D.  
Economic Fellow  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
hiroshi.matsushima@nyu.edu

/s/ Max Sarinsky  
Max Sarinsky  
Senior Attorney  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
max.sarinsky@nyu.edu

/s/ Burçin Ünel  
Burçin Ünel, Ph.D.  
Executive Director  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
burcin.unel@nyu.edu

/s/ Minhong Xu  
Minhong Xu, Ph.D.  
Economic Fellow  
Institute for Policy Integrity at  
NYU School of Law  
139 MacDougal Street, 3rd Fl.  
New York, NY 10012  
minhong.xu@nyu.edu

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