United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued March 23, 2021 Decided August 3, 2021

No. 20-1045

VECINOS PARA EL BIENESTAR DE LA COMUNIDAD COSTERA, ET AL.,
PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

RIO GRANDE LNG, LLC AND RIO BRAVO PIPELINE COMPANY,
LLC,
INTERVENORS


Nathan Matthews argued the cause for petitioners. With him on the joint briefs were Erin Gaines, Jennifer Richards and Gilberto Hinojosa.

Richard L. Revesz and Jason A. Schwartz were on the brief for amicus curiae the Institute for Policy Integrity at New York University School of Law in support of petitioners.

Robert M. Kennedy, Senior Attorney, Federal Energy Regulatory Commission, argued the cause for respondent.
With him on the brief were David L. Morenoff, Acting General Counsel, and Robert H. Solomon, Solicitor.


Jeffrey R. Holmstead was on the brief for amicus curiae Interstate Natural Gas Association of America in support of respondent.
No. 20-1093

VECINOS PARA EL BIENESTAR DE LA COMUNIDAD COSTERA, ET AL.,
PETITIONERS

v.

FEDERAL ENERGY REGULATORY COMMISSION,
RESPONDENT

TEXAS LNG BROWNSVILLE LLC,
INTERVENOR

Consolidated with 20-1094

On Petitions for Review of Orders
of the Federal Energy Regulatory Commission

Nathan Matthews argued the cause for petitioners. With him on the joint briefs were Jennifer Richards and Gilberto Hinojosa.

Scott Ray Ediger, Attorney, Federal Energy Regulatory Commission, argued the cause for respondent. With him on the brief were David L. Morenoff, Acting General Counsel, and Robert H. Solomon, Solicitor.

Mark R. Haskell, Brett A. Snyder, Barry M. Hartman, and Sandra E. Safro were on the brief for intervenor Texas LNG Brownsville LLC in support of respondent.
Before: Srinivasan, Chief Judge, Wilkins, Circuit Judge, and Ginsburg, Senior Circuit Judge.

Opinion for the Court filed by Circuit Judge Wilkins.

Wilkins, Circuit Judge: Petitioners seek review of the decision by the Federal Energy Regulatory Commission (“the Commission”) to authorize the construction and operation of three liquified natural gas (“LNG”) export terminals on the shores of the Brownsville Shipping Channel in Cameron County, Texas, and the construction and operation of two 135-mile pipelines that will carry LNG to one of those terminals. The petition in No. 20-1045 concerns the Commission’s approval of one of the terminals (the “Rio Grande terminal”) and the pipelines. The petitions in Nos. 20-1093 and 20-1094 concern the Commission’s approval of the other two terminals (the “Annova terminal” and “Texas terminal,” respectively).

Petitioners raise several claims under the National Environmental Policy Act (“NEPA”), the Administrative Procedure Act (“APA”), and the Natural Gas Act (“NGA”). In this opinion, we dismiss the petition in No. 20-1093 as moot, and grant the other petitions for review with respect to Petitioners’ claims that the Commission’s analyses of the projects’ impacts on climate change and environmental justice communities were deficient under NEPA and the APA, and that the Commission failed to justify its determinations of public interest and convenience under Sections 3 and 7 of the NGA. We remand without vacatur for the Commission to remedy those failures. In an accompanying judgment, we deny the petitions for review with respect to Petitioners’ remaining claims, which we find to be without sufficient merit to warrant explication in a published opinion, see, e.g., Greene v. Dalton, 164 F.3d 671, 676 (D.C. Cir. 1999).
The Commission and the Department of Energy ("the Department") share responsibility for regulating the domestic transport and export of LNG. The Department maintains exclusive authority over the export of LNG as a commodity, 42 U.S.C. § 7151(b). The Department has delegated to the Commission the authority to approve or disapprove the siting, construction, expansion, or operation of an LNG terminal for exporting LNG. U.S. Department of Energy, Delegation Order No. 00-004.00A, § 1.21.A (May 16, 2006); cf. 15 U.S.C. § 717b(e)(1). Thus, a would-be exporter of LNG must obtain authorization from the Department to export LNG and authorization from the Commission to construct and operate the necessary facilities. *Sierra Club v. FERC*, 827 F.3d 36, 41 (D.C. Cir. 2016). In addition, the NGA requires the Commission’s approval for the construction and operation of interstate LNG pipelines. 15 U.S.C. § 717f(c)(1)(A).

Before authorizing the construction and operation of a proposed LNG facility or pipeline, the Commission must conduct an environmental review under NEPA. See 42 U.S.C. § 4332(2)(C). Where, as here, the Commission determines that approval of an LNG facility or pipeline is a "major Federal action["] that will "significantly affect[[] the quality of the human environment," the Commission must prepare a detailed Environmental Impact Statement ("EIS") that addresses (i) the environmental impact of the proposed action; (ii) any "adverse environmental effects" that "cannot be avoided" if the proposal is implemented; (iii) available alternatives to the proposed action; (iv) the "relationship between local short-term uses of [the] environment and the maintenance and enhancement of long-term productivity"; and (v) "any irreversible and irretreivable commitments of resources" that "would be involved in the proposed action should it be implemented." *Id.*
The purpose of the EIS is to “force[] the agency to take a ‘hard look’ at the environmental consequences of its actions, including alternatives to its proposed course,” and to “ensure[] that these environmental consequences, and the agency’s consideration of them, are disclosed to the public.” *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017).

Apart from NEPA, Executive Order 12,898, § 1-101, 59 Fed. Reg. 7,629 (Feb. 11, 1994), requires that, “[t]o the greatest extent practicable and permitted by law,” federal agencies “shall make achieving environmental justice part of [their] mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of [their] programs, policies, and activities on minority populations and low-income populations.” *Id.* To that end, the Order requires federal agencies to conduct “environmental justice” analyses by “collect[ing], maintain[ing], and analyz[ing] information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations.” *Id.* § 3-302(b).

Finally, the NGA requires the Commission to determine whether a proposed project comports with the public interest. The NGA’s requirements differ depending on whether the proposed project is an LNG facility or pipeline. The Commission must authorize the construction and operation of a proposed LNG facility unless it determines that the facility “will not be consistent with the public interest.” 15 U.S.C. § 717b(a). By contrast, the Commission may not authorize the construction and operation of a proposed interstate LNG pipeline unless it determines that the pipeline “is or will be
required by the present or future public convenience and necessity.” *Id.* § 717f(e).

II.

In March 2016, Texas LNG Brownsville LLC (“Texas LNG, LLC”) applied to the Commission for authorization to construct and operate an LNG export terminal (the “Texas terminal”) on a 635-acre site on the northern shore of the Brownsville Shipping Channel in Cameron County, Texas. In May 2016, Rio Grande LNG, LLC (“Rio Grande, LLC”) applied to the Commission for authorization to construct and operate an LNG export terminal (the “Rio Grande terminal”) on a 750-acre site on the same shore. Also in May 2016, Rio Bravo Pipeline Company (“Rio Bravo Co.”) applied to the Commission for authorization to construct and operate a new interstate natural gas pipeline system to supply gas to the Rio Grande export terminal. (Both Rio Grande, LLC and Rio Bravo Co. are wholly-owned subsidiaries of NextDecade LNG, LLC, a U.S. energy project development and management company.). In July 2016, Annova LNG Common Infrastructure, LLC (“Annova, LLC”) and three affiliate entities applied to the Commission for authorization to construct and operate an LNG export terminal (the “Annova terminal”) on a 731-acre site on the southern shore of the Brownsville Shipping Channel. Each company had previously received authorization from the Department to export LNG.

Granting Authorizations Under Section 3 of the Natural Gas Act, 169 FERC ¶ 61,132 (Nov. 22, 2019) (“Annova Order”). Petitioners—residents, environmental groups, and a nearby city—intervened in the Commission’s proceedings and timely sought rehearing of the orders. In all of their requests for rehearing, Petitioners argued that the Commission’s analyses of the projects’ ozone emissions and impacts on climate change and environmental justice communities were deficient under NEPA and the APA, and that the Commission failed to justify its determinations of public interest and convenience under Sections 3 and 7 of the NGA. In their request for rehearing of the Commission’s order authorizing the Rio Grande and Rio Bravo projects, Petitioners also argued that the Commission violated NEPA by failing to adequately analyze alternative project designs.

The Commission denied Petitioners’ requests for rehearing in early 2020. See Order on Rehearing and Stay, 170 FERC ¶ 61,046 (Jan. 23, 2020) (Rio Grande terminal and Rio Bravo pipeline system); Order on Rehearing and Stay, 170 FERC ¶ 61,139 (Feb. 21, 2020) (Texas terminal); Order on Rehearing and Stay, 170 FERC ¶ 61,140 (Feb. 21, 2020) (Annova terminal). Petitioners timely sought review from this Court, and Texas LNG, LLC, Rio Grande, LLC, Rio Bravo Co., and Annova, LLC intervened as respondents. Prior to oral argument, Annova, LLC informed the Commission that it was abandoning its project, and sought permission from this Court to withdraw as an intervenor, which we granted. Because the Annova project will not go forward, we dismiss the petition in No. 20-1093 as moot. See, e.g., Oregon v. FERC, 636 F.3d 1203, 1206 (9th Cir. 2011). We have jurisdiction over the other petitions under 15 U.S.C. § 717r(b).
In this opinion, we address Petitioners’ claims that the Commission’s analyses of the projects’ impacts on climate change and environmental justice communities were deficient under NEPA and the APA, and that the Commission failed to justify its determinations of public interest and convenience under Sections 3 and 7 of the NGA.

A.

We begin with the Commission’s analyses of the projects’ greenhouse gas emissions.

We review an agency’s NEPA analysis under the arbitrary and capricious standard of the APA. *Nevada v. Dep’t of Energy*, 457 F.3d 78, 87 (D.C. Cir. 2006). Our mandate is not to “‘flyspeck’ an agency’s environmental analysis,” id. at 93, but “simply to ensure that the agency has adequately considered and disclosed the environmental impact of its actions,” *WildEarth Guardians v. Jewell*, 738 F.3d 298, 308 (D.C. Cir. 2013) (quoting *City of Olmsted Falls v. FAA*, 292 F.3d 261, 269 (D.C. Cir. 2002)). “Accordingly, we ask whether the agency examined the relevant data and articulated a satisfactory explanation for its action, including a rational connection between the facts found and the choice made.” *Birckhead v. FERC*, 925 F.3d 510, 515 (D.C. Cir. 2019) (per curiam) (internal quotation marks and alterations omitted) (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). We also ask whether the agency addressed “opposing viewpoints.” *Nevada*, 457 F.3d at 93; cf. 40 C.F.R. § 1502.9(c) (“At appropriate points in the final statement, the agency shall discuss any responsible opposing view that was not adequately discussed in the draft
statement and shall indicate the agency’s response to the issues raised.”).

In its EIS for each project, the Commission quantified the greenhouse gas emissions associated with the construction and operation of the project, described “existing and potential cumulative climate change impacts in the Project area,” No. 20-1045 J.A. 663 (Rio Grande terminal and Rio Bravo pipeline system); No. 20-1094 J.A. 1035 (Texas terminal), and explained that “[c]onstruction and operation of the Project would increase the atmospheric concentration of [greenhouse gases] in combination with past, current, and future emissions from all other sources globally and contribute incrementally to future climate change impacts,” No. 20-1045 J.A. 664; No. 20-1094 J.A. 1036.

In each EIS, however, the Commission concluded that it was “unable to determine the significance of the Project’s contribution to climate change.” No. 20-1045 J.A. 665; No. 20-1094 J.A. 1036. The Commission explained that “there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to [the] Project’s incremental contribution to [greenhouse gas emissions],” and that therefore “it is not currently possible to determine localized or regional impacts from [greenhouse gas] emissions from the Project.” No. 20-1045 J.A. 664–65; No. 20-1094 J.A. 1036.

Petitioners contend that the Commission was required to do more. Specifically, Petitioners argue that 40 C.F.R. § 1502.21(c) (codified at the time the Commission completed its EIS’s at 40 C.F.R. § 1502.22(b)), required the Commission to use the “social cost of carbon” protocol or some other generally accepted methodology to evaluate the impact of each project’s contribution to climate change. That regulation
provides that “[i]f . . . information relevant to reasonably foreseeable significant adverse impacts cannot be obtained . . . because the means to obtain it are not known, the agency shall include within the environmental impact statement . . . [t]he agency’s evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.” 40 C.F.R. § 1502.21(c). The “social cost of carbon” protocol, which Petitioners suggest as one generally accepted method for evaluating the significance of the projects’ contributions to climate change, is a tool for estimating the cost of climate change caused by greenhouse gas emissions, developed by a federal interagency working group in 2010, and “withdrawn as no longer representative of governmental policy” by executive order in 2017. See Executive Order 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017).

Petitioners raised their argument concerning 40 C.F.R. § 1502.21(c) in comments responding to the Commission’s draft EIS’s and in their rehearing requests, but the Commission at no point addressed the significance of that regulation. The Commission did, however, explain that it would not use the social cost of carbon protocol for three reasons: (1) no consensus exists as to the appropriate discount rate to use for analyses spanning multiple generations; (2) the tool does not measure the actual incremental impacts of a project on the environment; and (3) there are no established criteria identifying the monetized values that are to be considered “significant” for the purpose of a NEPA analysis. No. 20-1045 J.A. 158; No. 20-1094 J.A. 710.

To the extent that the Commission failed to respond to Petitioners’ argument that 40 C.F.R. § 1502.21(c) required it to use the social cost of carbon protocol or some other generally accepted methodology to assess of the impact of the projects’ greenhouse gas emissions, we agree with Petitioners that the
Commission failed to adequately analyze the impact of the projects’ greenhouse gas emissions. The regulation appears applicable on its face; the Commission determined that the projects would “contribute incrementally to future climate change impacts,” No. 20-1045 J.A. 664–65; No. 20-1094 J.A. 1036, but it could not obtain “information relevant to [those] impacts . . . because the means to obtain it [were] not known,” 40 C.F.R. § 1502.21(c). Therefore, 40 C.F.R. § 1502.21(c) would seem to have required the Commission to “evaluat[e] . . . such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.” Id. § 1502.21(c)(4). Yet the Commission did not discuss, or even cite, 40 C.F.R. § 1502.21(c) in its rehearing order. Nor did it do so in its briefing in this case. Nor did it cite any previous decision by this Court or the Commission addressing the significance of the regulation in any detail. Because the Commission failed to respond to significant opposing viewpoints concerning the adequacy of its analyses of the projects’ greenhouse gas emissions, we find its analyses deficient under NEPA and the APA. See, e.g., TransCanada Power Mktg. Ltd. v. FERC, 811 F.3d 1, 12–13 (D.C. Cir. 2015).

The Commission’s discussion of the social cost of carbon protocol does not excuse its failure to address the significance of 40 C.F.R. § 1502.21(c). Although we have previously held that the Commission was not required to use the social cost of carbon protocol where the Commission gave the same three reasons for not using the protocol that it gave in its orders denying Petitioners’ rehearing requests, see EarthReports, Inc. v. FERC, 828 F.3d 949, 956 (D.C. Cir. 2016), the petitioners in that case presented no argument concerning 40 C.F.R. § 1502.21(c), and so our decision did not address the significance of that regulation to the Commission’s refusal to use the social cost of carbon protocol. Moreover, if the protocol is a generally accepted method for estimating the
impact of greenhouse gas emissions—as the Commission has previously declined to dispute, see Order Denying Rehearing, 164 FERC ¶ 61,099, at *10 (Aug. 10, 2018)—and if Petitioners’ reading of 40 C.F.R. § 1502.21(c) is correct, then the Commission may have been obligated to use the social cost of carbon protocol in its EIS, notwithstanding its concerns that no consensus exists as to an appropriate discount rate, that the tool provides a dollar estimate but does not measure the actual incremental impacts of a project on the environment, and that there are no established criteria for evaluating whether a given monetary cost is “significant.” For instance, as Petitioners suggest, the Commission might have chosen a discount rate according to recommendations by the Office of Management and Budget in 2013, see Office of Mgmt. & Budget, Office of the President, OMB Circular A–4, at 30–35, or else used a range of rates, and articulated its own criteria for assessing the significance of the projected costs of the projects’ greenhouse gas emissions. Of course, we do not hold that the Commission was indeed required to do any of that. But we do hold that the Commission was required to address Petitioners’ argument concerning the significance of 40 C.F.R. § 1502.21(c), and that its failure to do so rendered its analyses of the projects’ greenhouse gas emissions deficient. On remand, the Commission must explain whether 40 C.F.R. § 1502.21(c) calls for it to apply the social cost of carbon protocol or some other analytical framework, as “generally accepted in the scientific community” within the meaning of the regulation, and if not, why not.

B.

We now turn to the Commission’s environmental justice analyses.
Although the executive order requiring agencies to assess the environmental effects of their actions on environmental justice communities expressly states that it does not create a private right to judicial review, Executive Order 12,898, § 6-609, 59 Fed. Reg. at 7,632–33, a petitioner may challenge an agency’s environmental justice analysis as arbitrary and capricious under NEPA and the APA. See Cnts Against Runway Expansion, Inc. v. FAA, 355 F.3d 678, 689 (D.C. Cir. 2004).

To assess the environmental justice impacts of each project, the Commission examined the project’s impacts on communities in census block groups within a two-mile radius of the project site, but not on communities farther afield. The Commission found that all communities within those census blocks were minority or low-income. No. 20-1045 J.A. 564 (Rio Grande terminal and Rio Bravo pipeline system); No. 20-1094 J.A. 691–92 (Texas terminal). The Commission proceeded to examine “whether any of the Project impacts would disproportionately affect those communities due to factors unique to those populations like inter-related ecological, aesthetic, historical, cultural, economic, social, or health factors.” No. 20-1045 Resp’t’s Br. at 53 (internal quotation marks and alterations omitted) (quoting No. 20-1045 J.A. 140–42); see also No. 20-1094 Resp’t’s Br. at 44–45. Finding the answer to be no, the Commission concluded that the Rio Grande terminal and Rio Bravo pipeline system “would not have disproportionate adverse effects on minority and low-income residents in the area,” No. 20-1045 J.A. 566, and that the Texas terminal would have “negligible impacts on environmental justice communities,” No. 20-1094 J.A. 968.

Petitioners argue that the Commission’s decision to analyze the projects’ impacts on environmental justice communities only in census blocks within two miles of the
project sites was arbitrary, given its determination that environmental effects from the projects would extend well beyond two miles from the project sites.

We agree. When conducting an environmental justice analysis, an agency’s delineation of the area potentially affected by the project must be “reasonable and adequately explained,” Cmty Against Runway Expansion, 355 F.3d at 689, and include “a rational connection between the facts found and the decision made,” id. at 685 (quoting State Farm, 463 U.S. at 43). Elsewhere in its EIS for each project, the Commission determined that the environmental effects of the project would extend beyond the census blocks located within a two-mile radius of the project site. For instance, the Commission determined that impacts on air quality from each project could occur within 31 miles. No. 20-1045 J.A. 610; No. 20-1094 J.A. 1008. The Commission has offered no explanation as to why, in light of that finding, it chose to delineate the area potentially affected by the projects to include only those census blocks within two miles of the project sites for the purposes of its environmental justice analyses. Because the Commission has offered no “rational connection between the facts found and the decision made,” State Farm, 463 U.S. at 43, we find its decision to analyze the projects’ impacts only on communities in census blocks within two miles of the project sites to be arbitrary. On remand, the Commission must explain why it chose to analyze the projects’ impacts only on communities in census blocks within two miles of the project sites, or else analyze the projects’ impacts on communities within a different radius of each project site. Additionally, it must explain whether its finding that “all project-affiliated populations are minority or low-income populations,” No. 20-1045 J.A. 142; No. 20-1094 J.A. 691–92, is still justified, and, if so, whether its conclusion that the projects “would not have disproportionate adverse effects on minority and low-income
residents in the area,” No. 20-1045 J.A. 566; see also No. 20-1094 J.A. 968, still holds.

C.

Because the Commission’s analyses of the projects’ impacts on climate change and environmental justice communities were deficient, the Commission must also revisit its determinations of public interest and convenience under Sections 3 and 7 of the NGA.

We review the Commission’s orders approving LNG facilities and pipelines, like its NEPA analyses, under the arbitrary and capricious standard of the APA. Minisink Residents for Envt’l Pres. & Safety v. FERC, 762 F.3d 97, 105–106 (D.C. Cir. 2014); Midcoast Interstate Transmission, Inc. v. FERC, 198 F.3d 960, 967 (D.C. Cir. 2000). Where the Commission rests a decision, at least in part, on an infirm ground, we will find the decision arbitrary and capricious. Williams Gas Processing-Gulf Coast Co. v. FERC, 475 F.3d 319, 330 (D.C. Cir. 2006).

In its orders approving the projects, the Commission explained its finding that the pipeline project was “required by the present or future public convenience and necessity,” 15 U.S.C. § 717f(e), and its refusal to find that the LNG facilities were “not . . . consistent with the public interest,” Id. § 717b(a), by relying on its NEPA analyses of the projects’ impacts on climate change and environmental justice communities. In each order, the Commission explained that it concluded in its EIS that it “could not determine whether a project’s contribution to climate change would be significant,” Texas Order at 61,857; Rio Grande and Rio Bravo Order at 61,899, and that the projects would not disproportionately affect environmental justice communities, Texas Order at 61,855;
Rio Grande and Rio Bravo Order at 61,896–97. In light of “the conclusions presented in [each] EIS,” the Commission further concluded that the LNG terminals were “not inconsistent with the public interest,” and that the pipeline project was “in the public convenience and necessity.” Texas Order at 61,860; Rio Grande and Rio Bravo Order at 61,903. As explained above, the Commission’s NEPA analyses of the projects’ impacts on climate change and environmental justice communities were deficient under the APA. 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. See Williams Gas, 475 F.3d at 330. On remand, the Commission must reconsider its determinations of public interest and convenience under Sections 3 and 7 of the NGA, along with its NEPA analyses of the projects’ impacts on climate change and environmental justice communities.

IV.

Intervenors argue that the appropriate remedy for any agency error in this case is to remand the Commission’s orders approving the projects without vacating the orders, because the Commission is likely to remedy any deficiencies in its orders on remand, and because vacating the orders would imperil Intervenors’ ability to obtain funding necessary to complete the projects in a timely fashion.

We agree. “The decision to vacate depends on two factors: the likelihood that ‘deficiencies’ in an order can be redressed on remand, even if the agency reaches the same result, and the ‘disruptive consequences’ of vacatur.” Black Oak Energy, LLC v. FERC, 725 F.3d 230, 244 (D.C. Cir. 2013) (quoting Allied-Signal v. Nuclear Regul. Comm’n, 988 F.2d 146, 150–51 (D.C. Cir. 1993)). Here both factors weigh against vacatur. We find
it reasonably likely that on remand the Commission can redress its failure of explanation with regard to its analyses of the projects’ impacts on climate change and environmental justice communities, and its determinations of public interest and convenience under Sections 3 and 7 of the NGA, while reaching the same result. See id. And we credit Intervenors’ assertion that vacating the orders would needlessly disrupt completion of the projects. We therefore remand to the Commission without vacatur for further proceedings consistent with this opinion.

So ordered.