

171 FERC ¶ 61,136
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

Jordan Cove Energy Project L.P.
Pacific Connector Gas Pipeline, LP

Docket Nos. CP17-495-001
CP17-494-001

ORDER ON REHEARING AND STAY

(Issued May 22, 2020)

1. On March 19, 2020, the Commission issued an order pursuant to section 3 of the Natural Gas Act (NGA)¹ and Part 153 of the Commission's regulations² authorizing Jordan Cove Energy Project L.P. (Jordan Cove) to site, construct, and operate a liquefied natural gas (LNG) export terminal and associated facilities (Jordan Cove LNG Terminal) in unincorporated Coos County, Oregon (Authorization Order).³ The Commission also authorized, pursuant to NGA section 7⁴ and Parts 157 and 284 of the Commission's regulations,⁵ Pacific Connector Gas Pipeline, LP (Pacific Connector) to construct and operate a new interstate natural gas pipeline system (Pacific Connector Pipeline) in Klamath, Jackson, Douglas, and Coos Counties, Oregon.

2. On April 17, 2020, the Commission received requests for rehearing from Jordan Cove and Pacific Connector, the Cow Creek Band of Umpqua Tribe of Indians (Cow Creek Band), and the Klamath Tribes. On April 20, 2020, the Commission received requests for rehearing from the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians (collectively, Confederated Tribes); Citizens for Renewables, Inc.,

¹ 15 U.S.C. § 717b (2018).

² 18 C.F.R. pt. 153 (2019).

³ *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 (2020) (Authorization Order).

⁴ 15 U.S.C. § 717f (2018).

⁵ 18 C.F.R. pt. 157 (2019).

Citizens Against LNG, and Jody McCaffree (collectively, Jody McCaffree); Oregon Department of Energy, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, and Oregon Department of Land Conservation and Development (collectively, State of Oregon); the Natural Resources Defense Council (NRDC); and, jointly, Sierra Club, Niskanen Center (on behalf of Bill Gow, Sharon Gow, Neal C. Brown Family LLC, Wilfred E. Brown, Elizabeth A. Hyde, Barbara L. Brown, Pamela Brown Ordway, Chet N. Brown, Evans Schaff Family LLC, Deb Evans, Ron Schaff, Stacey McLaughlin, Craig McLaughlin, Richard Brown, Twyla Brown, Clarence Adams, Stephany Adams, Will McKinley, Wendy McKinley, Frank Adams, Lorraine Spurlock, Toni Woolsey, Alisa Acosta, Gerrit Boshuizen, Cornelis Boshuizen, Robert Clarke, John Clarke, Carol Munch, Ron Munch, Mitzi Sulffridge, James Dahlman, John Dahlman), the Western Environmental Law Center, the Klamath Tribes, Center for Biological Diversity, Oregon Wild, Rogue Riverkeeper, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Greater Good Oregon, Friends of Living Oregon Waters, Surfrider Foundation, Oregon Women's Land Trust, Oregon Shores Conservation Coalition, League of Women's Voters of Coos County, League of Women's Voters of Umpqua County, League of Women's Voters of Rouge Valley, League of Women's Voters of Klamath County, Rogue Climate, Umpqua Watersheds, Waterkeeper Alliance, Coast Range Forest Watch, Cascadia Wildlands, Oregon Physicians for Social Responsibility, Hair on Fire Oregon, Citizens for Renewables, Citizens Against LNG, Francis Eatherington, Janet Hodder, Michael Graybill, and Natural Resources Defense Council (collectively, Sierra Club). On April 21, 2020, the Commission received a late request for rehearing and stay from Kenneth E. Cates, Kristine Cates, James Davenport, Archina Davenport, David McGriff, Emily McGriff, Andrew Napell, Dixie Peterson, Paul Washburn, and Carol Williams. NRDC and Sierra Club also requested to stay the Authorization Order until the Commission acts on rehearing.

3. As discussed below, we deny and grant rehearing in part, and deny the stay requests as moot.

I. Background

4. The Jordan Cove LNG Terminal is designed to produce a nominal capacity of up to 7.8 million metric tonnes per annum (MTPA) of LNG for export.⁶ The project facilities will include: gas inlet and gas conditioning facilities; five liquefaction trains, each with a nominal capacity of 1.56 MTPA, for a total nominal capacity of 7.8 MTPA; two full-containment LNG storage tanks, each with a net capacity of approximately 160,000 cubic meters (m³); a marine slip, including one LNG carrier loading berth

⁶ Authorization Order, 170 FERC ¶ 61,202 at P 7.

capable of accommodating LNG carriers with a cargo capacity of 89,000 m³ to 217,000 m³;⁷ and support systems.⁸

5. Construction of the Jordan Cove LNG Terminal will affect about 577 acres of land, and mitigation associated with the project is anticipated to impact about 778 additional acres of land.⁹ Once construction is complete, operation of the Jordan Cove LNG Terminal will require the use of approximately 200 acres, across two parcels—Ingram Yard and the South Dunes Site—which are connected by a one-mile-long Access Utility Corridor.¹⁰ The main LNG production facilities will be located on the Ingram Yard parcel, while the interconnection with the Pacific Connector Pipeline will be located on the South Dunes Site parcel.¹¹

6. In December 2011, Jordan Cove received authorization from the Department of Energy, Office of Fossil Energy (DOE/FE) to export annually up to 438 billion cubic feet (Bcf) per year equivalent of natural gas in the form of LNG to countries with which the United States has a Free Trade Agreement (FTA);¹² and, in March 2014, Jordan Cove received conditional authorization to export annually up to 292 Bcf equivalent to non-FTA countries.¹³ On February 6, 2018, Jordan Cove filed an application with DOE/FE to

⁷ We note that Jordan Cove is only authorized by the U.S. Coast Guard to receive vessels with nominal capacities of up to 148,000 m³. Final EIS at 4-91.

⁸ Authorization Order, 170 FERC ¶ 61,202 at PP 8-11.

⁹ *Id.* P 12.

¹⁰ *Id.*

¹¹ Fort Chicago LNG II U.S. L.P., an affiliate of Jordan Cove, currently owns 295 acres of land at the terminal site. Jordan Cove will acquire the use of the remaining lands through easements or leases.

¹² *Jordan Cove Energy Project, L.P.*, FE Docket No. 11-127-LNG, Order No. 3041 (December 7, 2011). The 2011 FTA authorization stated that the 30-year term of the authorization would commence on the earlier of the date of the first export or December 7, 2021; and, the 2014 non-FTA, 20-year authorization required Jordan Cove to commence operations within seven years of the date of the authorization (i.e., by March 24, 2021).

¹³ *Jordan Cove Energy Project, L.P.*, FE Docket No. 12-32-LNG, Order No. 3413 (March 24, 2014). These authorizations were associated with Jordan Cove's previously-proposed export terminal, in Docket No. CP13-483-000. As explained in the Authorization Order, the Commission denied that proposal, along with Pacific Connector's previously proposed pipeline project (Docket No. CP13-492-000), on

amend its FTA and non-FTA authorizations to modify the quantity of LNG Jordan Cove is authorized to export (reflecting changes Jordan Cove made to its proposed facilities and additional engineering analysis) and to “re-set the dates by which [Jordan Cove] must commence exports.”¹⁴ Specifically, Jordan Cove requested to reduce the approved export volume to FTA countries from 438 Bcf per year equivalent to 395 Bcf per year equivalent, and to increase the approved export volume to non-FTA countries from 292 Bcf equivalent to 395 Bcf equivalent.¹⁵ In July 2018, DOE/FE amended Jordan Cove’s FTA authorization in accordance with Jordan Cove’s request.¹⁶ Jordan Cove’s requested amendment of its non-FTA authorization remains pending before the DOE/FE.¹⁷

7. The Pacific Connector Pipeline is designed to provide up to 1,200,000 dekatherms per day (Dth/d) of firm natural gas transportation service from interconnects with existing natural gas pipeline systems near Malin, Oregon, to the Jordan Cove LNG Terminal, for liquefaction and export.¹⁸ The Pacific Connector Pipeline will include approximately 229 miles of 36-inch-diameter natural gas pipeline, a new 62,200-horsepower (hp) compressor station, three new meter stations, and appurtenant facilities.¹⁹ The Pacific

March 11, 2016. Authorization Order, 170 FERC ¶ 61,202 at P 5 (citing *Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,190, *reh’g denied*, 157 FERC ¶ 61,194 (2016) (2016 Order)).

¹⁴ Jordan Cove’s February 6, 2018 Amendment Application filed in FE Docket Nos. 11-127-LNG and 12-32-LNG at 3-5.

¹⁵ Assuming a gas density of 0.7 kg/m³, 395 Bcf/year is 7.84 MTPA.

¹⁶ *Jordan Cove Energy Project, L.P.*, FE Docket No. 11-127-LNG, Order No. 3041-A (July 20, 2018). According to the amended authorization, Jordan Cove is authorized to export up to 395 Bcf equivalent to FTA countries for a 30-year term beginning on the earlier date of the first export or July 20, 2028. All other obligations, rights, and responsibilities established in the December 2011 authorization remain in effect.

¹⁷ Jordan Cove’s amended application to export LNG to non-FTA nations is pending before the DOE/FE in FE Docket No. 12-32-LNG.

¹⁸ Authorization Order, 170 FERC ¶ 61,202 at P 15.

¹⁹ *Id.*

Connector Pipeline is 95.8% subscribed under two executed precedent agreements with Jordan Cove for 1,150,000 Dth/d at a negotiated rate.²⁰

II. Procedural Matters

A. The Authorization Order was Procedurally Valid

8. NRDC claims that the Authorization Order is procedurally invalid, as it was issued after the Commission had already, during a February 20, 2020 open meeting held under the Government in the Sunshine Act, voted, 2-to-1, to substantively deny the project.²¹ NRDC states that Commission regulations permit items to be struck from the Commission meeting “without vote or notice,”²² but that the Commission failed to strike the then-proposed draft from the agenda or make a request to otherwise hold in abeyance the projects’ review until a later date, before casting a vote.²³ NRDC contends that the Commission “must explain how its actions did not result in a substantive denial of Jordan Cove on February 20, 2020.”²⁴

9. NRDC’s arguments rest on a misunderstanding of Commission practice and procedure. The Commission, an independent agency that consists of up to five members,²⁵ acts through its written orders,²⁶ which are issued following a favorable vote of the majority.²⁷ At the February 20, 2020 open meeting, the Commission voted 2-to-1 to reject

²⁰ The first precedent agreement relates to service during commissioning of the Jordan Cove LNG Terminal and the second is a long-term precedent agreement relating to service once the terminal has achieved commercial operation. Authorization Order, 170 FERC ¶ 61,202 at P 17; Pacific Connector Application at 16-17.

²¹ NRDC Rehearing Request at 99 (citing 5 U.S.C. § 552b (2018)).

²² *Id.* at 102 (citing 18 C.F.R. § 375.204(b) (2019)).

²³ *Id.* at 103.

²⁴ *Id.* at 104.

²⁵ *See* 16 U.S.C. § 792 (2018); 18 C.F.R. § 376.102 (2019).

²⁶ *See, e.g., Indianapolis Power & Light Co.*, 48 FERC ¶ 61,040, at 61,203 & n.29 (“The Commission speaks through its orders.”), *order on reh’g*, 49 FERC ¶ 61,328 (1989).

²⁷ 42 U.S.C. 7171 (2018) (“Actions of the Commission shall be determined by a majority vote of the members present.”).

an order drafted by Commission staff through the Commission's usual internal practice, that would have authorized the project.²⁸ Because the Commission rejected the proposed order, and therefore no action was taken on Jordan Cove and Pacific Connector's applications, they remained pending.²⁹ NRDC is correct that the proposed draft order was not "struck" from the open meeting agenda under the Commission's regulations; however, the Commission was under no obligation to do so.³⁰ In addition, the fundamental requirement that an agency "disclose the basis"³¹ for its decision aptly demonstrates the flaw in NRDC's suggested result: the Commission could not lawfully discharge its responsibilities by voting to deny Jordan Cove and Pacific Connector's applications for the project without issuing an order or opinion disclosing its basis for doing so.

B. Late Motion to Intervene

10. On March 27, 2020, Cow Creek Band filed an untimely motion to intervene in the Jordan Cove LNG Terminal proceeding. Cow Creek Band also filed a request for rehearing in both the Jordan Cove LNG Terminal and Pacific Connector Pipeline proceedings. The Commission has explained that "[w]hen late intervention is sought after the issuance of a dispositive order, the prejudice to other parties and burden upon

²⁸ NRDC recognizes both that, at the February 20, 2020 meeting, the Commissioners had before them a proposed "order to approve the Project," and that a Commission vote "substantively approves or denies *orders* as proposed." NRDC Rehearing Request at 101-102 (emphasis added). Thus, even under NRDC's logic, the Commission voted to deny, i.e., not to issue, the proposed order, which was an order to *approve* the project

²⁹ See *MidAmerican Energy Holdings Co.*, 118 FERC ¶ 61,003, at 61,009 n.45 (2007) ("The Commission, a five-member agency . . . acts through its written orders Phrased differently, in the absence of such orders, including before it has issued such orders, the Commission cannot be said to have acted.").

³⁰ See 18 C.F.R. § 375.204(b). Nor was it necessary for the Commission to change the "subject matter" of the meeting in advance. NRDC Request for Rehearing at 100 (citing 18 C.F.R. § 375.204(a)(4)(i)-(ii) (2018)). The subject matter did not change. See Sunshine Act Meeting Notice (Feb. 13, 2020), <https://www.ferc.gov/CalendarFiles/20200213175606-sunshine.pdf>.

³¹ See, e.g., *FPC v. United Gas Pipe Line Co.*, 393 U.S. 71, 73 (1968) ("Before the courts can properly review agency action, the agency must disclose the basis of its order and 'give clear indication that it has exercised the discretion with which Congress has empowered it'") (citing *Phelps Dodge Corp. v. NLRB*, 313 U.S. 177, 197 (1941)).

the Commission of granting the late intervention may be substantial.”³² In such circumstances, movants bear a higher burden to demonstrate good cause for the granting of late intervention,³³ and generally it is Commission policy to deny late intervention at the rehearing stage.³⁴

11. Here, Cow Creek Band explains that although it timely intervened in the Pacific Connector Pipeline proceeding,³⁵ it did not realize that the Commission would rule on the Jordan Cove LNG Terminal and the Pacific Connector Pipeline in the same order.³⁶ Thus, it requests party status in the Jordan Cove LNG Terminal proceeding because it realizes the full impact of the order on the Tribe.

12. As stated above, it is Commission policy to deny late intervention at the rehearing stage.³⁷ Allowing an intervention at the rehearing stage in the proceeding would delay, prejudice, and place additional burdens on the Commission and the certificate holder.³⁸ Thus, we deny Cow Creek Band’s late motions to intervene and reject its rehearing

³² *Nat’l Fuel Gas Supply Corp.*, 139 FERC ¶ 61,037 (2012) (*National Fuel*). See, e.g., *Fla. Gas Transmission Co.*, 133 FERC ¶ 61,156 (2010).

³³ See *Cal. Dep’t of Water Res. & the City of Los Angeles*, 120 FERC ¶ 61,057, at n.3 (2007), *reh’g denied*, 120 FERC ¶ 61,248, *aff’d sub nom. Cal. Trout & Friends of the River v. FERC*, 572 F.3d 1003 (9th Cir. 2009).

³⁴ See *PennEast Pipeline Co.*, 162 FERC ¶ 61,279 (2018) (denying two motions for late intervention and rejecting requests for rehearing filed 20 and 27 days after the Commission issued a certificate order for the PennEast Project); *Tenn. Gas Pipeline Co., L.L.C.*, 162 FERC ¶ 61,013, at P 10 (2018) (*Tennessee Gas*) (denying late motions to intervene and rejecting requests for rehearing filed two weeks and thirteen months after the Commission issued a certificate order for the Connecticut Expansion Project); *NationalFuel*, 139 FERC ¶ 61,037 (denying a late motion to intervene and request for rehearing filed 30 days after the Commission issued a certificate order for the Northern Access Project).

³⁵ See Cow Creek Band October 23, 2017 Motion to Intervene in Docket No. CP17-494-000.

³⁶ Cow Creek Band Late Motion to Intervene in Docket No. CP17-495-000.

³⁷ See *supra* note 34.

³⁸ *National Fuel*, 139 FERC ¶ 61,037 at P 18 (“When late intervention is sought after the issuance of a dispositive order, the prejudice to other parties and burden upon the Commission of granting the late intervention may be substantial.”).

request to the extent it deals with the Jordan Cove terminal. We note that Cow Creek Band filed a timely, unopposed motion to intervene in the Pacific Connector Pipeline proceeding; thus, we are addressing its timely request for rehearing as to that proposal in this order. Further, Cow Creek Band's rehearing request as to the Jordan Cove LNG Terminal raises several of the same cultural resource issues raised by other parties, which are addressed below.

C. Late Requests for Rehearing

13. Pursuant to section 19(a) of the NGA, an aggrieved party must file a request for rehearing within 30 days after the issuance of the Commission's order.³⁹ Under the Commission's regulations, read in conjunction with section 19(a), the deadline to seek rehearing was 5:00 pm U.S. Eastern Time, April 20, 2020.⁴⁰ Kenneth E. Cates, Kristine Cates, James Davenport, Archina Davenport, David McGriff, Emily McGriff, Andrew Napell, Dixie Peterson, Paul Washburn, and Carol Williams failed to meet this deadline. Because the 30-day rehearing deadline is statutorily based, it cannot be waived or extended, and their requests must be rejected as late.⁴¹ Nevertheless, these individuals'

³⁹ 15 U.S.C. § 717r(a) (2018) ("Any person, State, municipality, or State commission aggrieved by an order issued by the Commission in a proceeding under this act to which such person, State, municipality, or State commission is a party may apply for a rehearing within thirty days after the issuance of such order"). The Commission has no discretion to extend this deadline. *See, e.g., Transcontinental Gas Pipe Line Co.*, 161 FERC ¶ 61,250, at P 10 n.13 (2017) (collecting cases).

⁴⁰ Rule 2007 of the Commission's Rules of Practice and Procedure provides that when the time period prescribed by statute falls on a weekend, the statutory time period does not end until the close of the next business day. *See* 18 C.F.R. § 385.2007(a)(2) (2019). The Commission's business hours are "from 8:30 a.m. to 5:00 p.m.," and filings – paper or electronic – made after 5:00 p.m. will be considered filed on the next regular business day. *See* 18 C.F.R. §§ 375.101(c), 2001(a)(2) (2019).

⁴¹ *See Annova Common Infrastructure, LLC*, 170 FERC ¶ 61,140, at P 6 (2020) (dismissing a request for rehearing received by the Commission at 5:45 p.m., after the 5:00 p.m. on the day of the filing deadline); *Tex. LNG Brownsville, LLC*, 170 FERC ¶ 61,139, at P 7 (2020) (dismissing a request for rehearing received by the Commission at 5:48 p.m., after the 5:00 p.m. on the day of the filing deadline); *Atl. Coast Pipeline, LLC*, 164 FERC ¶ 61,110, at P 12 (2018) (dismissing requests for rehearing received at 5:02 p.m. and 10:19 p.m., after 5:00 p.m. on the day of the filing deadline); *NEXUS Gas Transmission, LLC*, 164 FERC ¶ 61,054, at P 12 (2018) (dismissing a request for rehearing received by the Commission at 9:29 p.m., after the 5:00 p.m. on the day of the filing deadline). Here, the rehearing request was received at 7:54 p.m. on April 20, so that it was considered filed on April 21, one day too late.

arguments are addressed below as their rehearing request “incorporate[s] by reference all arguments, facts, and authorities cited in the Request for Rehearing and Stay of Order filed today in this cause by Sierra Club”⁴²

D. Party Status

14. Under NGA section 19(a) and Rule 713(b) of the Commission’s Rules and Practice and Procedure, only a party to a proceeding is eligible to request rehearing of a final Commission decision.⁴³ Any person seeking to become a party must file a motion to intervene pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure.⁴⁴ The Niskanen Center, Neal C. Brown Family LLC, Wilfred Brown, Chet N. Brown, and Twyla Brown never sought to intervene in either the Jordan Cove LNG Terminal or Pacific Connector Pipeline proceedings and they may not join in the rehearing request filed by Sierra Club. Further, Elizabeth A. Hyde, Richard Brown, Alisa Acosta, and James Dahlman never sought to intervene in the Jordan Cove LNG Terminal proceeding; accordingly, they may not join in the rehearing request filed by Sierra Club as to the that proceeding.⁴⁵

E. Deficient Rehearing Request

15. The NGA requires that a request for rehearing set forth the specific grounds on which it is based.⁴⁶ Additionally, Rule 713 of Commission’s regulations provide that requests for rehearing must “[s]tate concisely the alleged error in the final decision” and “include a separate section entitled ‘Statement of Issues,’ listing each issue in a separately enumerated paragraph” that includes precedent relied upon.⁴⁷ Any issue not so listed will

⁴² Kenneth E. Cates et al. Rehearing Request at 1. In addition, as noted below the Commission does not permit rehearing requests to incorporate by reference arguments from other filings. *Infra* PP15, 17.

⁴³ 15 U.S.C. § 717f(a) (2018); 18 C.F.R. § 385.713(b) (2019).

⁴⁴ 18 C.F.R. § 385.214(a)(3) (2019).

⁴⁵ On April 13, 2020, Mark Sheldon filed a request for rehearing and stay of the Authorization Order. On May 5, 2020, the Commission issued a notice rejecting Mr. Sheldon’s request for rehearing and stay because he is not a party to the proceedings. *See* 15 U.S.C. § 717r(a) (2018); 18 C.F.R. §§ 385.212(a)(2), 385.214 (2019).

⁴⁶ 15 U.S.C. § 717r(a).

⁴⁷ 18 C.F.R. § 385.713 (2019).

be deemed waived.⁴⁸ Consistent with these requirements, the Commission “has rejected attempts to incorporate by reference arguments from a prior pleading because such incorporation fails to inform the Commission as to which arguments from the referenced pleading are relevant and how they are relevant.”⁴⁹

16. Klamath Tribes’ April 17, 2020 request for rehearing is deficient because it fails to include a Statement of Issues section separate from its arguments, as required by Rule 713 of the Commission’s Rules of Practice and Procedure. Accordingly, we dismiss Klamath Tribes’ rehearing request. However, we note that Klamath Tribes joined Sierra Club’s request for rehearing, which raises the same issues and is addressed below.

17. The rehearing petitions filed by Klamath Tribes, Cow Creek Band, Confederated Tribes, and Ms. McCaffree attempt to incorporate by reference arguments made in prior pleadings, other requests for rehearing, or the dissent to the Authorization Order.⁵⁰ As noted above, this is improper and we will not consider such arguments. To the extent the arguments incorporated by reference are properly raised in other requests for rehearing, they are addressed below.

⁴⁸ *Id.* § 385.713(c)(2) (2019).

⁴⁹ *San Diego Gas & Elec. Co. v. Sellers of Market Energy*, 127 FERC ¶ 61,269, at P 295 (2009). *See Tenn. Gas Pipeline Co., L.L.C.*, 156 FERC ¶ 61,007, at P 7 (2016) (“the Commission’s regulations require rehearing requests to provide the basis, in fact and law, for each alleged error including representative Commission and court precedent. Bootstrapping of arguments is not permitted.”). *See also ISO New England, Inc.*, 157 FERC ¶ 61,060, at P 4 (2016) (explaining that the identical provision governing requests for rehearing under the Federal Power Act “requires an application for rehearing to ‘set forth specifically the ground or grounds upon which such application is based,’ and the Commission has rejected attempts to incorporate by reference grounds for rehearing from prior pleadings”); *Alcoa Power Generating, Inc.*, 144 FERC ¶ 61,218, at P 10 (2013) (“The Commission, however, expects all grounds to be set forth in the rehearing request, and will dismiss any ground only incorporated by reference.”) (citations omitted).

⁵⁰ Klamath Tribes Rehearing Request at 1 (incorporating by reference arguments made in Sierra Club’s request for rehearing); Cow Creek Band Rehearing Request at 8 (incorporating by reference arguments made in prior comments); Confederated Tribes Rehearing Request at 14-15 (incorporating by reference arguments made in prior comments and the dissent to the Authorization Order); McCaffree Rehearing Request at 7, 34 (incorporating by reference arguments made in in prior comments; the State of Oregon’s, Sierra Club’s, and the Confederated Tribes’ requests for rehearing; and the dissent to the Authorization Order).

F. Answer

18. On May 5, 2020, Jordan Cove and Pacific Connector filed a motion for leave to answer and answer to the requests for rehearing. Rule 713(d)(1) of the Commission's Rules of Practice and Procedure prohibits answers to a request for rehearing.⁵¹ Accordingly, we reject Jordan Cove's and Pacific Connector's filing.

G. Evidentiary Hearing

19. Sierra Club asserts that the Commission must hold an evidentiary hearing to resolve substantial disputed issues regarding the conclusion that the project is in the public interest, and the alleged lack of completed studies, data gaps and lack of information on impacts to local and regional businesses, water quality and quantity impacts, greenhouse gas (GHG) impacts, and health and safety impacts.⁵² Sierra Club contends that an evidentiary hearing would allow the Commission to fully meet its obligations under the NGA, National Environmental Policy Act (NEPA), and the Fifth Amendment to the U.S. Constitution.⁵³

20. An evidentiary, trial-type hearing is necessary only where there are material issues of fact in dispute that cannot be resolved on the basis of the written record.⁵⁴ No party has raised a material issue of fact that the Commission cannot resolve on the basis of the written record. As demonstrated by the discussion below, the existing written record provides a sufficient basis to resolve the issues relevant to this proceeding. The Commission has done all that is required by giving interested parties an opportunity to participate through evidentiary submission in written form.⁵⁵ Further, we disagree with Sierra Club's cursory statement that an evidentiary hearing is required to enable the Commission to meet its obligations under the NGA, NEPA, and the Fifth Amendment. Sierra Club is obligated to "set forth specifically the ground or grounds upon which" its request for rehearing is based.⁵⁶ Simply making blanket allegations that the Commission violated the law without

⁵¹ 18 C.F.R. § 385.713(d)(1) (2019).

⁵² Sierra Club Rehearing Request at 44-45.

⁵³ *Id.* at 45.

⁵⁴ *See, e.g., S. Union Gas Co. v. FERC*, 840 F.2d 964, 970 (D.C. Cir. 1988); *Dominion Transmission, Inc.*, 141 FERC ¶ 61,183, at P 15 (2012).

⁵⁵ *Moreau v. FERC*, 982 F.2d 556, 568 (D.C. Cir. 1993).

⁵⁶ 15 U.S.C. § 717r(a) (2018). *See also Constellation Energy Commodities Group, Inc. v. FERC*, 457 F.3d 14, 22 (D.C. Cir. 2006) ("Each quoted passage states a conclusion; neither makes an argument. Parties are required to present their arguments to

any explanation or analysis does not meet this requirement. Accordingly, we affirm the Authorization Order's denial of Sierra Club's request for a trial-type evidentiary hearing.⁵⁷

21. We disagree with Sierra Club's contention that we did not act on Stacey McLaughlin's request for additional procedures.⁵⁸ In the Authorization Order, the Commission found that implementing additional procedures was not needed or appropriate: "this order reviews both the non-environmental and environmental issues associated with the proposals."⁵⁹ We agree.

III. Stay Request

22. Sierra Club requests that the Commission stay the Authorization Order pending issuance of an order on rehearing.⁶⁰ NRDC joins Sierra Club's request for a stay, arguing that by issuing the Authorization Order in the midst of the COVID-19 pandemic, the Commission unnecessarily exposed affected landowners to immediate, irreparable injury through eminent domain condemnation actions, requiring them to divert their attention to ensure that they protect their legal rights due to mandatory filing deadlines under the NGA.⁶¹ On May 5, 2020, Jordan Cove and Pacific Connector filed an answer to the requests for stay. This order addresses and denies Sierra Club's and NRDC's requests for rehearing; accordingly, we dismiss the requests for stay as moot.

IV. Discussion

A. Natural Gas Act

1. Denial of an Identical Application in 2016

23. Petitioners assert that the Commission's approval of the projects in the Authorization Order, after denying an "identical" project application in 2016, was arbitrary and capricious

the Commission in such a way that the Commission knows 'specifically ... the ground on which rehearing [i]s being sought.'").

⁵⁷ Authorization Order, 170 FERC ¶ 61,202 at P 26.

⁵⁸ Sierra Club Rehearing Request at 44.

⁵⁹ Authorization Order, 170 FERC ¶ 61,202 at P 28.

⁶⁰ Sierra Club Rehearing Request at 107, 110.

⁶¹ NRDC Rehearing Request at 106.

without a more substantial justification.⁶² NRDC states that the “*only* material difference between the ‘new’ Project and the Project denied in 2016 is that Pacific Connector conducted an Open Season in which it received *no creditworthy bids*[.]”⁶³

24. The Authorization Order explained in detail how the proposal approved in the Authorization Order differed from the proposal denied in the 2016 Order in several key aspects.⁶⁴ As the Commission explained in the Authorization Order, the 2016 Order “denied Pacific Connector’s proposal because Pacific Connector, by failing to provide precedent agreements or sufficient other evidence of need, failed to demonstrate market support for its proposal.”⁶⁵ Pacific Connector sought rehearing of the 2016 Order, in an attempt to reopen the record to provide evidence of market demand for the project, in the form of precedent agreements for approximately 77% of the project’s capacity, which had been entered into less than a month after the issuance of the 2016 Order.⁶⁶ The Commission declined to reopen the record, finding that Pacific Connector had not met the “heavy burden” required to justify reopening a proceeding; specifically, the Commission found that Pacific Connector had not identified any “extraordinary circumstances” that would overcome an agency’s interest in finality, as Pacific Connector had sufficient time during the life of the proceeding to demonstrate market demand for the project.⁶⁷ Significantly, however, the Commission reiterated the finding in the 2016 Order that the denial was without prejudice to Jordan Cove and Pacific Connector submitting an application in the future, “should the companies show a market need for these services in the future.”⁶⁸

25. This is precisely what Pacific Connector and Jordan Cove provided in the instant proceeding. As the Commission explained in the Authorization Order, Pacific Connector provided evidence that it had entered into a long-term precedent agreement with Jordan

⁶² *Id.* at 9-11; State of Oregon Rehearing Request at 43-49; McCaffree Rehearing Request at 10.

⁶³ NRDC Rehearing Request at 13 (emphasis in original).

⁶⁴ Authorization Order, 170 FERC ¶ 61,202 at P 35 (citing 2016 Order, 157 FERC ¶ 61,194 at P 29).

⁶⁵ *Id.* P 35.

⁶⁶ 2016 Order, 157 FERC ¶ 61,194 at P 13.

⁶⁷ *Id.* P 17.

⁶⁸ *Id.* P 27 (quoting *Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,160 at P 48).

Cove for approximately 96% of the project's capacity, which, as discussed below, is sufficient evidence of market demand for the project.⁶⁹ Accordingly, the petitioners' requests for rehearing on this matter are denied.

2. Principal Place of Business

26. Ms. McCaffree states that the Commission erred in finding that Jordan Cove and Pacific Connector's principal place of business is Houston, Texas.⁷⁰ The Commission's regulations pertaining to applications under section 3 of the NGA require applicants to indicate the "town or city where the applicant's principal office is located."⁷¹ Similarly, the Commission's regulations for applications under section 7 of the NGA require applicants to set forth their principal place of business.⁷² The Authorization Order stated that Jordan Cove and Pacific Connector are both Delaware limited partnerships, each with its principal place of business in Houston, Texas, which was what was indicated in the application.⁷³

27. Ms. McCaffree contends that Portland, Oregon, is the location where Jordan Cove and Pacific Connector direct, control, and coordinate the project entities' activities and claims that Portland, Oregon, is the applicants' principal place of business.⁷⁴ There is no statutory, regulatory, or policy requirement that binds an applicant's principal place of business to the place from which it expects to direct, control, and/or coordinate project activities. Moreover, Ms. McCaffree has not provided any support for the claim that

⁶⁹ Authorization Order, 170 FERC ¶ 61,202 at PP 64-65; Pacific Connector Application at 15. Petitioners cite to *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009), to support their argument that although the Commission may "change its position, it must provide a substantial justification when the new position rests upon factual findings that contradict the prior position." NRDC Rehearing Request at 14; State of Oregon Rehearing Request at 43. As we explained above, the facts of the 2016 case are substantially different to the facts presented here. In the present case, Pacific Connector provided precedent agreements for service—agreements that were notably lacking from the 2016 case until after the Commission issued its order denying the project, leading the Commission to deny the proposal.

⁷⁰ McCaffree Rehearing Request at 36.

⁷¹ 18 C.F.R. § 153.7(a)(3) (2019).

⁷² 18 C.F.R. § 157.6(b)(1) (2019).

⁷³ Authorization Order, 170 FERC ¶ 61,202 at P 4.

⁷⁴ McCaffree Rehearing Request at 36.

project activities would not be directed, controlled, and/or coordinated from Houston, Texas. Jordan Cove and Pacific Connector attested in their application that their principal office is in Houston, Texas, and Ms. McCaffree has provided no support for her claims to the contrary. Moreover, the place of business was not a material matter in the Authorization. Accordingly, the request for rehearing on this issue is denied.

3. Need for the Pacific Connector Pipeline

28. Several petitioners allege that in the Authorization Order, the Commission failed to demonstrate that the Pacific Connector Pipeline is required by the public convenience and necessity.⁷⁵ Specifically, petitioners asserted that: (1) Pacific Connector's precedent agreements with Jordan Cove are not an adequate indicator of need for the pipeline;⁷⁶ (2) the Commission improperly ignored evidence that there was no domestic market demand for the transportation of natural gas on the Pacific Connector Pipeline;⁷⁷ and (3) the Commission improperly stated that the Pacific Connector would provide public benefits to American natural gas producers when the gas to be transported on the pipeline would be produced in Canada.⁷⁸

29. First, petitioners assert that is inappropriate for the Commission to rely on Pacific Connector's precedent agreements with Jordan Cove as evidence of the public need for the project.⁷⁹ Sierra Club takes issue with the Commission's policy of not "look[ing] behind" precedent agreements, asserting that this policy is arbitrary and capricious, particularly in instances, such as this, where precedent agreements have been entered into with only one affiliate buyer, subscribing capacity for a "speculative" project.⁸⁰ Petitioners also argue that the Commission erred in assessing the public benefits of Pacific Connector's precedent agreements with Jordan Cove, as those precedent agreements were "for export," and no public benefits would be derived from

⁷⁵ NRDC Rehearing Request at 17-35; Sierra Club Rehearing Request at 5-18; State of Oregon Rehearing Request at 46-49; McCaffree Rehearing Request at 8-9.

⁷⁶ NRDC Rehearing Request at 17-30; Sierra Club Rehearing Request at 5-13; State of Oregon Rehearing Request at 46-47; McCaffree Rehearing Request at 8-9.

⁷⁷ NRDC Rehearing Request at 31-35.

⁷⁸ *Id.* at 31; Sierra Club Rehearing Request at 15-18; State of Oregon Rehearing Request at 47-49.

⁷⁹ NRDC Rehearing Request at 17-30; Sierra Club Rehearing Request at 5-13; State of Oregon Rehearing Request at 42-47.

⁸⁰ Sierra Club Rehearing Request at 7.

the service provided, and that it would otherwise be inappropriate to credit export capacity in the Commission's public convenience and necessity analysis, under the U.S. Court of Appeals for the D.C. Circuit's opinion in *City of Oberlin v. FERC*.⁸¹ Further, petitioners allege, beside the precedent agreements, additional evidence indicates that there is a lack of market for the Pacific Connector Pipeline, as no market exists for LNG to be exported from the Jordan Cove LNG Terminal.⁸²

30. We affirm the Commission's finding in the Authorization Order that precedent agreements are significant evidence of demand for a project.⁸³ As the court stated in *Minisink Residents for Environmental Preservation & Safety v. FERC*, and again in *Myersville Citizens for a Rural Community, Inc. v. FERC*, nothing in the Certificate Policy Statement or in any precedent construing it suggests that the policy statement requires, rather than permits, the Commission to assess a project's benefits by looking

⁸¹ NRDC Rehearing Request at 22-31 (citing *City of Oberlin, Ohio v. FERC*, 937 F.3d 599, 605 (D.C. Cir. 2019) (*City of Oberlin*)); Sierra Club Rehearing Request at 12-19 (same); State of Oregon Rehearing Request at 46-47 (same); McCaffree Rehearing Request at 8 (same).

⁸² NRDC Rehearing Request at 31-35; McCaffree Rehearing Request at 8.

⁸³ Authorization Order, 170 FERC ¶ 61,202 at P 61 (citing *Minisink Residents for Envtl. Pres. & Safety v. FERC*, 762 F.3d 97, 110 n.10 (D.C. Cir. 2014) (*Minisink*); *Sierra Club v. FERC*, 867 F.3d 1357, 1379 (D.C. Cir. 2017) (affirming Commission reliance on preconstruction contracts for 93% of project capacity to demonstrate market need)); *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, at 61,748 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement) (precedent agreements, though no longer required, "constitute significant evidence of demand for the project"); *Twp. of Bordentown v. FERC*, 903 F.3d 234, 263 (3d Cir. 2018) ("As numerous courts have reiterated, FERC need not 'look[] beyond the market need reflected by the applicant's existing contracts with shippers.'") (quoting *Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 183 F.3d 1291, 1301, 1311 (D.C. Cir. 2015) (*Myersville*)); *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199 at *1 (D.C. Cir. Feb.19, 2019) (unpublished) (precedent agreements are substantial evidence of market need); *see also Midship Pipeline Co., LLC*, 164 FERC ¶ 61,103, at P 22 (2018) (long-term precedent agreements for 64 percent of the system's capacity is substantial demonstration of market demand); *PennEast Pipeline Co., LLC*, 164 FERC ¶ 61,098, at P 16 (2018) (affirming that the Commission is not required to look behind precedent agreements to evaluate project need); *NEXUS Gas Transmission, LLC*, 160 FERC ¶ 61,022, at P 41 (2017), *order on reh'g*, 164 FERC ¶ 61,054 (2018), *aff'd in relevant part, City of Oberlin*, 937 F.3d at 605 (finding need for a new pipeline system that was 59% subscribed).

beyond the market need reflected by the applicant's precedent agreements with shippers.⁸⁴ As stated in the Authorization Order, approximately 96% of the Pacific Connector's capacity has been subscribed by Jordan Cove under precedent agreements, one of which is a long-term precedent agreement.⁸⁵ Thus, there is sufficient evidence in the record to support our finding that the service to be provided by the pipeline is needed.⁸⁶

31. NRDC asserts that the Commission's finding that Pacific Connector's precedent agreements with Jordan Cove are sufficient evidence of demand for the project is inconsistent with its denial of an application to construct a pipeline in *Independence Pipeline Company*.⁸⁷ NRDC argues that the facts in *Independence* are "remarkably similar" to those here, and states that because Pacific Connector "had every ability and reason to enter into precedent agreements at least seven years ago" and yet only entered into precedent agreements after the Commission denied Pacific Connector and Jordan Cove's application in 2016, that we should look upon the precedent agreements in this proceeding with suspicion.⁸⁸

⁸⁴ *Minisink*, 762 F.3d at 110 n.10; *see also Myersville*, 183 F.3d at 1311. Further, Ordering Paragraph (G) of the Authorization Order requires Pacific Connector to file a written statement affirming that it has executed contracts for service at the levels provided for in their precedent agreement prior to commencing construction. Authorization Order, 170 FERC ¶ 61,202 at ordering para. (G).

⁸⁵ Authorization Order, 170 FERC ¶ 61,202 at PP 17, 65. The other precedent agreement relates to service during commissioning of the Jordan Cove LNG terminal. *Id.* P 17.

⁸⁶ *See, e.g., Midship Pipeline Co., LLC*, 164 FERC ¶ 61,103 at P 22 (long-term precedent agreements for 64% of the system's capacity is substantial demonstration of market demand); *NEXUS Gas Transmission, LLC*, 160 FERC ¶ 61,022 at P 41, *order on reh'g*, 164 FERC ¶ 61,054, *aff'd in relevant part, City of Oberlin*, 937 F.3d at 605 (finding need for a new pipeline system that was 59% subscribed); *Elba Express Co., L.L.C.*, 155 FERC ¶ 61,293, at P 8 (2016) (granting partial waiver where five of six shippers executed contracts, representing approximately 58% of the project's capacity); *Dominion Transmission Inc.*, 136 FERC ¶ 61,031, at P 8 (2011) (granting partial waiver where shippers executed contracts representing approximately 75% of the project's capacity).

⁸⁷ 89 FERC ¶ 61,283 (1999) (*Independence*).

⁸⁸ NRDC Rehearing Request at 17-22.

32. NRDC's argument misapplies the reasoning in *Independence* and inappropriately disregards the factual differences between these two proceedings. As an initial matter, the "remarkable similarities" NRDC points to are almost entirely between the *Independence* proceeding and the 2016 proceeding.⁸⁹ As explained in the Authorization Order, in *Independence*, the Commission denied Independence's application construct to an interstate natural gas pipeline after finding that Independence failed to provide contractual evidence of market support for the project, and was only able to present the required contractual evidence by creating an affiliate shipper and entering into a precedent agreement with it on the eve of a Commission-imposed deadline to present the required evidence.⁹⁰ NRDC asserts that circumstances here are similar to the *Independence* proceeding because in 2016 the Commission denied Pacific Connector's application for similarly failing to demonstrate contractual evidence of market demand for the project, and Pacific Connector only presented evidence of demand for the project after the Commission had indicated it would deny the application.⁹¹

33. The Authorization Order explained that here, unlike either the *Independence* or Jordan Cove/Pacific Connector 2016 proceedings, Pacific Connector's current application included signed precedent agreements, including a long-term precedent agreement with Jordan Cove for 96% of the Pacific Connector Pipeline's capacity, something we find significant, and sufficient, evidence of demand for the project.⁹² Thus, as demonstrated in the Authorization Order, *Independence* is inapposite here.⁹³

34. Finally, NRDC's unsupported argument that the Commission must look upon Pacific Connector's precedent agreements with Jordan Cove with skepticism because Pacific Connector could have entered into these agreements any time in the last "four" or "seven" years, and therefore the precedent agreements likely were created only to falsify evidence of market demand,⁹⁴ is similarly without merit, and is rejected.⁹⁵

⁸⁹ *Id.* at 18-19.

⁹⁰ Authorization Order, 170 FERC ¶ 61,202 at P 63.

⁹¹ NRDC Rehearing Request at 17-22.

⁹² Authorization Order, 170 FERC ¶ 61,202 at P 63.

⁹³ *Id.*

⁹⁴ NRDC Rehearing Request at 19-21.

⁹⁵ Because Commission findings as to the facts must be supported by substantial evidence to be considered conclusive, 15 U.S.C. § 717r(b) (2018), the Commission

35. Regardless, petitioners argue that the Commission should look beyond the need for transportation of natural gas in interstate commerce evidenced by the precedent agreements in this proceeding and make a judgement based on how the gas will be used after it is delivered at the end of the pipeline and the interstate transportation is completed.⁹⁶ However, under Commission policy, if there are precedent or service agreements, the Commission does not, and need not, make judgments about the needs of individual shippers⁹⁷ or ultimate end use of the commodity, and we see no justification to make an exception to that policy here.

36. NRDC and the State of Oregon⁹⁸ argue that the Authorization Order is inconsistent with the D.C. Circuit's ruling in *City of Oberlin*.⁹⁹ NRDC asserts that the D.C. Circuit "held that contracts for the export of gas cannot be factored into a Section 7 public convenience and necessity review[.]"¹⁰⁰ NRDC misreads the D.C. Circuit's holding in *City of Oberlin*, which was that the Commission must fully explain why "it is lawful to credit precedent agreements with foreign shippers serving foreign customers toward a finding that an interstate pipeline is required by the public," not that doing so is unlawful.¹⁰¹ In compliance with the D.C. Circuit's directive in *City of Oberlin*, the Authorization Order did precisely this.¹⁰² Nonetheless, we provide additional explanation below.

37. As an initial matter, the D.C. Circuit's directive in *City of Oberlin* is not directly implicated here. As noted, the D.C. Circuit directed the Commission to explain why "it is lawful to credit precedent agreements with foreign shippers servicing foreign

cannot accept unsupported arguments.

⁹⁶ McCaffree Rehearing Request at 8-9; State of Oregon Rehearing Request at 43-47; Sierra Club Rehearing Request at 9-11; NRDC Rehearing Request at 9-34.

⁹⁷ Certificate Policy Statement, 88 FERC at 61,744 (citing *Transcontinental Gas Pipe Line Corp.*, 82 FERC ¶ 61,084, at 61,316 (1998)).

⁹⁸ NRDC Rehearing Request at 22-31; State of Oregon Rehearing Request at 46-47.

⁹⁹ 937 F.3d 599.

¹⁰⁰ NRDC Rehearing Request at 22.

¹⁰¹ *City of Oberlin*, 937 F.3d 599, 607.

¹⁰² See Authorization Order, 170 FERC ¶ 61,202 at PP 84-86.

customers”¹⁰³ In this case, Pacific Connector has provided precedent agreements with Jordan Cove, a domestic shipper, to transport gas in interstate commerce to the Jordan Cove LNG Terminal and it cannot operate without the gas to be delivered via the pipeline.

38. We also find that it is appropriate for the Commission to give credit to the precedent agreements in this case for transportation of gas that the shipper intends to liquefy for export. To determine whether the Commission may give credit to the precedent agreements in this case, we turn to the text of the statute. NGA section 7(e) requires the Commission to issue a certificate if the Commission finds that the applicant’s proposal “is or will be required by the present or future public convenience and necessity.”¹⁰⁴ The courts have stated that the Commission must consider “all factors bearing on the public interest,”¹⁰⁵ Petitioners cite no precedent, and we are aware of none, to suggest that the Commission should exclude Pacific Connector’s precedent agreements from that broad assessment.

39. On the contrary, as we stated in the Authorization Order, Congress directed, in NGA section 3(c), that the importation or exportation of natural gas from or to “a nation with which there is in effect a free trade agreement requiring national treatment for trade in natural gas, shall be deemed to be consistent with the public interest, and applications for such importation or exportation shall be granted without modification or delay.”¹⁰⁶ In addition, NGA section 3(a) requires the approval of export to any country unless the proposed exportation “will not be consistent with the public interest.”¹⁰⁷ The D.C. Circuit has found that the language in NGA section 3(a) demonstrates that “NGA § 3, unlike § 7, ‘sets out a general presumption favoring such authorization.’”¹⁰⁸ While these provisions of the NGA are not directly implicated by Pacific Connector’s application under NGA section 7(c), they do inform our determination that the proposed pipeline is

¹⁰³ *City of Oberlin*, 937 F.3d 599, 607.

¹⁰⁴ *Id.* 717f(e).

¹⁰⁵ *Atl. Refining Co. v. Pub. Serv. Comm’n of State of N.Y.*, 360 U.S. 378, 391 (“This is not to say that rates are the only factor bearing on the public convenience and necessity, for § 7(e) requires the Commission to evaluate all factors bearing on the public interest.”).

¹⁰⁶ 15 U.S.C. § 717b(c) (2018).

¹⁰⁷ *Id.* § 717b(a).

¹⁰⁸ *EarthReports, Inc. v. FERC*, 828 F.3d 949, 953 (2016) (citing *W. Va. Pub. Servs. Comm’n v. Dep’t of Energy*, 681 F.2d 847, 856 (D.C. Cir. 1982)).

in the public convenience and necessity because it will support the public interest of exporting natural gas to FTA countries. We therefore find that it is permissible for the Commission to consider precedent agreements with LNG export facilities as one of the factors bearing on the public interest in its public convenience and necessity determination.

40. We also disagree with the parties' argument that the Commission cannot credit the precedent agreements because the contracts will "purely benefit foreign customers."¹⁰⁹ We view transportation service for all shippers as providing domestic public benefits, and do not weigh various prospective end uses differently for the purpose of determining need. This includes shippers transporting gas in interstate commerce for eventual export, since such transportation will provide domestic public benefits, including: contributing to the development of the gas market, in particular the supply of reasonably-priced gas; adding new transportation options for producers, shippers, and consumers; boosting the domestic economy and the balance of international trade; and supporting domestic jobs in gas production, transportation, and distribution, and domestic jobs in industrial sectors that rely on gas or support the production, transportation, and distribution of gas.

41. In this case, the Authorization Order stated the Pacific Connector will provide additional capacity to transport gas out of the Rocky Mountain production area and that one of the Pacific Connector Pipeline's primary interconnects, Ruby Pipeline, "extend[s] from Wyoming to Oregon, delivering gas from the Rocky Mountain production area to west coast markets."¹¹⁰ Furthermore, as discussed above, the production and sale of domestic gas contributes to the growth of the economy and supports domestic jobs in gas production, transportation, and distribution. These are valid domestic public benefits of the Pacific Connector Pipeline, which do not require us to distinguish between gas supplies that will be consumed domestically and those that will be consumed abroad.¹¹¹

42. In addition, looking at the situation broadly, gas imports and exports benefit domestic markets; thus, contracts for the transportation of gas that will be imported or exported are appropriately viewed as indicative of a domestic public benefit. The North American gas market has numerous points of export and import, with volumes changing constantly in response to changes in supply and demand, both on a local scale, as local distribution companies' and other users' demand changes, and on a regional or national

¹⁰⁹ NRDC Rehearing Request 23.

¹¹⁰ Authorization Order, 170 FERC ¶ 61,202 at PP 47, 85.

¹¹¹ Accordingly, despite Ms. McCaffree's contention, the Pacific Connector pipeline is not a "section 3 pipeline." *See* Authorization Order, 170 FERC ¶ 61,202 at PP 48-51.

scale, as the market shifts in response to weather and economic patterns.¹¹² Any constraint on the transportation of domestic gas to points of export risks negating the efficiency and economy the international trade in gas provides to domestic consumers.

43. Sierra Club next claims that it is inappropriate for the Commission to rely on Pacific Connector's precedent agreements where they have been entered into with only one affiliate buyer.¹¹³ Affiliation with a project sponsor does not lessen a shipper's need for capacity and its contractual obligation to pay for its subscribed service.¹¹⁴ "[A]s long as the precedent agreements are long term and binding, we do not distinguish between pipelines' precedent agreements with affiliates or independent marketers in establishing market need for a proposed project."¹¹⁵ We find that the relationship between Jordan Cove and Pacific Connector will neither lessen Pacific Connector's need for capacity nor diminish Jordan Cove's obligation to pay for its capacity under the terms of its contract.¹¹⁶ When considering applications for new certificates, the Commission's sole

¹¹² See, e.g., U.S. Energy Information Administration (EIA), *Colorado State Profile and Energy Estimates* (updated March 12, 2019), <https://www.eia.gov/state/analysis.php?sid=CO#55> (describing Colorado as the seventh-largest natural gas producing state in the nation, with minimal natural gas storage capacity, and transporting gas to the west coast); EIA, *Natural Gas Weekly Update*, October 24, 2018, https://www.eia.gov/naturalgas/weekly/archivenew_ngwu/2018/10_25/ (pipeline explosion in Canada leads to lower U.S. gas imports and higher regional prices).

¹¹³ Sierra Club Rehearing Request at 7.

¹¹⁴ See *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 45 (2017), *order on reh'g*, 163 FERC ¶ 61,197, at P 90 (2018), *aff'd*, *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at *3 (D.C. Cir. Feb. 19, 2019) (*Mountain Valley*). See also, e.g., *Greenbrier Pipeline Co., LLC*, 101 FERC ¶ 61,122, at P 59 (2002), *reh'g denied*, 103 FERC ¶ 61,024 (2003).

¹¹⁵ *Millennium Pipeline Co. L.P.*, 100 FERC ¶ 61,277, at P 57 (2002) (*Millennium*) (citing *Tex. E. Transmission Corp.*, 84 FERC ¶ 61,044 (1998)). See also *City of Oberlin*, 937 F.3d at 605 (finding petitioners' argument that precedent agreements with affiliates are not the product of arms-length negotiations without merit, because the Commission explained that there was no evidence of self-dealing and stated that the pipeline would bear the risk of unsubscribed capacity); *Myersville Citizens for a Rural Community, Inc. v. FERC*, 783 F.3d 1301, 1311 (D.C. Cir. 2015) (*Myersville*) (rejecting argument that precedent agreements are inadequate to demonstrate market need).

¹¹⁶ Further, without compelling record evidence, we will not speculate on the motives of a regulated entity or its affiliate.

concerns regarding affiliates of the pipeline as shippers is whether there may have been undue discrimination against a non-affiliate shipper.¹¹⁷ Here, the Commission did not find¹¹⁸ any evidence of impropriety or self-dealing to indicate anti-competitive behavior or affiliate abuse. We affirm that determination.

44. Finally, NRDC contends that additional evidence, particularly signals in the LNG market, suggest that the Pacific Connector Pipeline is not needed.¹¹⁹ Unlike under NGA section 7, the Commission does not assess market need for LNG exports under NGA section 3. Rather, as we have explained previously, DOE has exclusive jurisdiction over commodity exports, and issues inherent in that decision.¹²⁰ And here, as noted in the Authorization Order, DOE has already determined that Jordan Cove's exportation of 438 Bcf per year of domestically-produced natural gas to free trade nations is consistent with the public interest. Therefore, no further analysis by the Commission regarding market need for LNG is required or permitted.

4. **The Public Interest Determination for the Jordan Cove LNG Terminal**

45. Petitioners assert that the Commission erred in finding that the Jordan Cove LNG Terminal is consistent with the public interest. Specifically, petitioners state that the Jordan Cove LNG Terminal is not consistent with the public interest, as: (1) its only source of gas (the Pacific Connector Pipeline) is not required by the public convenience and necessity;¹²¹ (2) Jordan Cove failed to demonstrate a market need for its LNG (as it did in 2016);¹²² and (3) the Commission improperly relied on the economic benefits of the exportation of LNG as a commodity in its determination that Jordan Cove is in the public interest.¹²³

¹¹⁷ See 18 C.F.R. § 284.7(b) (2019) (requiring transportation service to be provided on a non-discriminatory basis).

¹¹⁸ Authorization Order, 170 FERC ¶ 61,202 at PP 76-77.

¹¹⁹ NRDC Rehearing Request at 31-35.

¹²⁰ *Rio Grande LNG, LLC*, 170 FERC ¶ 61,046, at n.26 (2020).

¹²¹ NRDC Rehearing Request at 35-36.

¹²² McCaffree Rehearing Request at 8-9.

¹²³ State of Oregon Rehearing Request at 27-29.

46. NRDC, citing to the Commission's 2016 denial of Pacific Connector and Jordan Cove's previous proposals, again argues that Jordan Cove cannot be consistent with the public interest because there is no need for the Pacific Connector Pipeline, the Jordan Cove LNG Terminal's sole source of natural gas.¹²⁴ As demonstrated in the Authorization Order¹²⁵ and above,¹²⁶ the Pacific Connector Pipeline is required by the public convenience and necessity; therefore, this argument fails.

47. Additionally, Ms. McCaffree's assertion that the Jordan Cove LNG Terminal is not consistent with the public interest due to an "unrealistic assessment of market demand"¹²⁷ similarly fails. As we discussed above, while it is outside of the Commission's NGA section 3 authority to assess market demand for LNG exports, we view the DOE's approval of Jordan Cove's application to export LNG to FTA nations as sufficient evidence of market demand.¹²⁸

48. The State of Oregon asserts that the Commission cannot disclaim jurisdiction over the export of the LNG commodity pursuant to section 3 of the NGA, while also relying on the benefits of those exports, including "benefits to the local and regional economy" and "the provision of new market access for natural gas producers" in determining the Jordan Cove LNG Terminal is consistent with the public interest.¹²⁹ The State of Oregon is mistaken. As the Commission stated in the Authorization Order, and as acknowledged by the State of Oregon, section 3 of the NGA does not provide the Commission any authority to approve or disapprove the import or export of LNG.¹³⁰ The Commission, in assessing whether or not the construction and operation of the Jordan Cove LNG Terminal would be consistent with the public interest, does not examine economic claims relating to the exportation of the commodity of natural gas, which are within DOE's exclusive jurisdiction, nor did the Commission rely on these claims in determining that the siting, construction, and operation of the Jordan Cove LNG Terminal was not inconsistent with the public interest. While the Commission acknowledged the economic

¹²⁴ NRDC Rehearing Request at 35-36.

¹²⁵ Authorization Order, 170 FERC ¶ 61,202 at PP 294.

¹²⁶ *See supra* PP 28-47.

¹²⁷ McCaffree Rehearing Request at 8-9.

¹²⁸ *See supra* P 44.

¹²⁹ State of Oregon Rehearing Request at 27-29.

¹³⁰ Authorization Order, 170 FERC ¶ 61,202 at P 32; *see* 15 U.S.C. § 717b (2018); State of Oregon Rehearing Request at 28-29.

benefits of the proposal, the Commission's determination examined other factors, including the prior use of the site, the mitigation of environmental impacts, as well as PHMSA's Letter of Determination that the siting of the LNG terminal would comply with federal safety standards.¹³¹

5. Open Season for Capacity Subject to a Right of First Refusal

49. As part of its application, Pacific Connector filed a *pro forma* open-access tariff applicable to services provided on its proposed pipeline. Pacific Connector proposed open season procedures if capacity posted for bidding is subject to a right of first refusal (ROFR). Section 284.221(d)(2) of the Commission's regulations gives eligible shippers a regulatory right to request an open season to potentially avoid pre-granted abandonment of their ROFR capacity.¹³²

50. Pacific Connector's proposed General Terms and Conditions (GT&C) section 10.4 states that "[Pacific Connector] may ... hold an open season for capacity that is subject to a [Right of First Refusal], no earlier than eighteen (18) Months prior to the termination or expiration date or potential termination date for the eligible Service Agreement."¹³³ The Commission concluded that the proposed 18-month period would not be consistent with the 6- to 12- month period that the Commission in *Transcontinental Gas Pipe Line Corporation* found to be a reasonable period before a contract ends for a shipper to notify the pipeline company whether the shipper wants to renew its contract.¹³⁴ The Commission directed Pacific Connector to revise its open season process for ROFR capacity to be consistent with the timeframe in *Transco I*.¹³⁵

51. On rehearing, Jordan Cove and Pacific Connector object to this directive and renew the proposal to begin the open season for ROFR capacity up to 18 months prior to the end date of a shipper's existing service agreement.¹³⁶ Jordan Cove and Pacific Connector state that potential customers at the Jordan Cove LNG Terminal will not contract for liquefaction services without assurance of a corresponding contract for

¹³¹ Authorization Order, 170 FERC ¶ 61,202 at P 40-43.

¹³² 18 C.F.R. § 284.221(d)(2) (2019).

¹³³ Authorization Order, 170 FERC ¶ 61,202 at P 127.

¹³⁴ *Id.* at P 128 (quoting *Transcontinental Gas Pipe Line Corporation*, 103 FERC ¶ 61,295, at P 20 (2003) (*Transco I*)).

¹³⁵ Authorization Order, 170 FERC ¶ 61,202 at P 128.

¹³⁶ Jordan Cove and Pacific Connector Rehearing Request at 18-24.

pipeline capacity, demonstrating a need to synchronize the contracting processes.¹³⁷ Because the market demands of the Jordan Cove LNG Terminal require it to contract for liquefaction capacity more than 12 months in advance, they explain the open season for ROFR capacity on the pipeline must also begin more than 12 months in advance.¹³⁸ They assert that this mismatch in timing will materially and adversely impact both the LNG Terminal's and the Pipeline's ability to execute contracts for their services.¹³⁹

52. We grant rehearing and approve Pacific Connector's proposed GT&C section 10.4 of its *pro forma* tariff. There are various competing interests to consider in determining how soon before contract termination the ROFR process must be completed.¹⁴⁰ An existing shipper with ROFR capacity may have an interest in making a final decision close to the time that its contract terminates, giving the shipper an opportunity to decide whether and how much of its capacity to retain, not only in light of the current market value of the capacity as shown by the third party bids in the open season, but also in light of a current assessment of the existing shipper's capacity needs.¹⁴¹ A third party bidder may have an interest in knowing whether it has obtained the capacity well before the existing shipper's contract terminates.¹⁴² A winning third party bidder may need time to finalize any business arrangements that are premised on obtaining the capacity before it commences service.¹⁴³ As Jordan Cove states, the market demands of its LNG terminal require it to contract for capacity more than one year in advance,¹⁴⁴ and liquefaction agreements currently require customers to exercise extension options at least three years in advance.¹⁴⁵ Similarly, Pacific Connector's service agreements with its customers will include optional extension periods that must be exercised three years in advance, to mirror the timeframe when Jordan Cove and Pacific Connector would expect to begin

¹³⁷ *Id.* at 19-20.

¹³⁸ *Id.* at 20-21.

¹³⁹ *Id.* at 21.

¹⁴⁰ *Dominion Transmission, Inc.*, 111 FERC ¶ 61,135, at P 17 (2005).

¹⁴¹ *Transco I*, 103 FERC ¶ 61,295 at PP 19-20.

¹⁴² *Dominion Transmission, Inc.*, 111 FERC ¶ 61,135 at P 17.

¹⁴³ *Id.*

¹⁴⁴ Jordan Cove and Pacific Connector Rehearing Request at 20-21.

¹⁴⁵ *Id.*

remarketing capacity at the LNG terminal and on the pipeline.¹⁴⁶ The unique relationship between an interstate pipeline that predominantly serves an LNG terminal and that terminal is different than the domestic natural gas pipeline market, and therefore supports a different balance of interests between existing shippers and potential third party bidders. Therefore, we conclude that Pacific Connector's proposal to retain the flexibility to start the bidding process for ROFR capacity as much as 18 months before the termination or expiration date, or the potential termination date, of a contract is reasonable. Accordingly, the Commission grants rehearing and accepts Pacific Connector's proposed 18-month outer limit in GT&C section 10.4.

6. Eminent Domain

53. On rehearing, Sierra Club and the State of Oregon argue that the Commission has failed to satisfy the requirements of the Fifth Amendment of the U.S. Constitution, and the NGA, by granting the power of eminent domain through the Authorization Order.¹⁴⁷ Sierra Club contends that the Authorization Order: (1) erred by determining that a finding of public convenience and necessity under the NGA is the equivalent to the finding of "public use" required by the Fifth Amendment;¹⁴⁸ (2) improperly provided for eminent domain authority in a conditioned certificate;¹⁴⁹ (3) failed to condition the use of eminent domain upon final Commission staff review of residential construction plans;¹⁵⁰ (4) violated the due process rights of landowners;¹⁵¹ and (5) failed to preclude the use of "quick take" procedures.¹⁵² The State of Oregon also contend that the Authorization Order failed to adequately assess a "public use."¹⁵³

¹⁴⁶ *Id.* at 21.

¹⁴⁷ Sierra Club Rehearing Request at 19, 30-37; State of Oregon Rehearing Request at 12, 43.

¹⁴⁸ Sierra Club Rehearing Request at 19, 31-34.

¹⁴⁹ *Id.* at 30-34.

¹⁵⁰ *Id.* at 35.

¹⁵¹ *Id.* at 42.

¹⁵² *Id.* at 35-37.

¹⁵³ State of Oregon Rehearing Request at 12.

54. The Authorization Order explained that the Commission itself does not confer eminent domain powers.¹⁵⁴ Under NGA section 7, the Commission has jurisdiction to determine if the construction and operation of proposed interstate pipeline facilities are in the public convenience and necessity.¹⁵⁵ Once the Commission makes that determination and issues a natural gas company a certificate of public convenience and necessity, it is NGA section 7(h) that authorizes that certificate holder to acquire the necessary land or property to construct the approved facilities by exercising the right of eminent domain if it cannot acquire the easement by an agreement with the landowner.¹⁵⁶ The D.C. Circuit has held that “[t]he Commission does not have the discretion to deny a certificate holder the power of eminent domain.”¹⁵⁷

55. The Fifth Amendment to the Constitution provides that private property may not be taken for public use without just compensation.¹⁵⁸ We affirm that, having determined that the Pacific Connector Pipeline serves the public convenience and necessity, we are not required to make a separate finding that the project serves a “public use” in order for a certificate holder to pursue condemnation proceedings in U.S. District Court or a state court pursuant to the NGA section 7(h).¹⁵⁹ The U.S. Supreme Court has explained that “legislatures are better able [than courts] to assess what public purposes should be advanced by an exercise of the taking power.”¹⁶⁰ Here, Congress articulated in the NGA

¹⁵⁴ Authorization Order, 170 FERC ¶ 61,202 at P 87.

¹⁵⁵ 15 U.S.C. § 717f(e) (2018).

¹⁵⁶ Authorization Order, 170 FERC ¶ 61,202 at P 97 (citing 15 U.S.C. § 717f(h) (2018)).

¹⁵⁷ *Midcoast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 973 (D.C. Cir. 2000) (*Midcoast Interstate*).

¹⁵⁸ U.S. CONST. amend. V.

¹⁵⁹ See *Atl. Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at P 79 (2017). See also, e.g., *Midcoast Interstate*, 198 F.3d at 973 (holding that Commission’s determination that pipeline “serve[d] the public convenience and necessity” demonstrated that it served a “public purpose” for Fifth Amendment purposes).

¹⁶⁰ *Hawaii Hous. Auth. v. Midkiff*, 467 U.S. 229, 244 (1984) (“Thus, if a legislature, state or federal, determines there are substantial reasons for an exercise of the taking power, courts must defer to its determination that the taking will serve a public use.”); *Nat’l R.R. Passenger Corp. v. Bos. & Me. Corp.*, 503 U.S. 407, 422-23 (1992) (“We have held that the public use requirement of the Takings Clause is coterminous with the regulatory power, and

its position that “transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.”¹⁶¹ Neither Congress nor any court has suggested that there was a further test,¹⁶² beyond the Commission’s determination under NGA section 7(e),¹⁶³ that a proposed pipeline was required by the public convenience and necessity, such that certain certificated pipelines furthered a public use, and thus were entitled to use eminent domain, while others did not.¹⁶⁴ The D.C. Circuit has confirmed that the Commission’s public convenience and necessity finding necessarily satisfies the Fifth Amendment’s public use requirement.¹⁶⁵

that the Court will not strike down a condemnation on the basis that it lacks a public use so long as the taking “is rationally related to a conceivable public purpose. . . .”).

¹⁶¹ 15 U.S.C. § 717(a) (2018).

¹⁶² *Cf.* Sierra Club Rehearing Request at 20-21 (arguing that no court has held that economic benefit alone is adequate to support a public use determination) (citing, e.g., *Kelo v. City of New London*, 545 U.S. 469, 479-80 (2015) (upholding a city’s use of eminent domain to implement economic development plan)).

¹⁶³ *Id.* § 717f(e).

¹⁶⁴ *See, e.g., N. Border Pipeline Co. v. 86.72 Acres of Land*, 144 F.3d 469, 470–71 (7th Cir. 1998) (under the Natural Gas Act, “issuance of the certificate [of public convenience and necessity] to [pipeline] carries with it the power of eminent domain to acquire the necessary land when other attempts at acquisition prove unavailing”); *Maritimes & Ne. Pipeline, L.L.C. v. Decoulos*, 146 F. App’x 495, 498 (1st Cir. 2005) (noting that once a certificate of public convenience and necessity is issued by FERC, and the pipeline is unable to acquire the needed land by contract or agreement with the owner, the only issue before the district court in the ensuing eminent domain proceeding is just compensation for the taking); *Rockies Exp. Pipeline LLC v. 4.895 Acres of Land, More or Less*, 734 F.3d 424, 431 (6th Cir. 2013) (rejecting landowner’s claim for damages from eminent domain taking by pipeline as an impermissible collateral attack on the essential fact findings made by the Commission in issuing the certificate order authorizing the pipeline); *E. Tennessee Nat. Gas Co. v. Sage*, 361 F.3d 808, 823 (4th Cir. 2004) (affirming district court’s determination that the certificate of public convenience and necessity issued by FERC gave the pipeline the right to exercise eminent domain and thus an interest in the landowners’ property).

¹⁶⁵ *See Mid Coast Interstate Transmission, Inc. v. FERC*, 198 F.3d 960, 973 (D.C. Cir. 2000); *see also* Authorization Order, 170 FERC ¶ 61,202 at P 99.

56. Sierra Club challenges this conclusion on rehearing and argues that such a determination was rejected in *City of Oberlin*.¹⁶⁶ Sierra Club contends that the Authorization Order failed to properly balance the potential use of eminent domain against the project's public benefits.¹⁶⁷ Sierra Club's cite to *City of Oberlin* is inapplicable here. There, the D.C. Circuit concluded, given the fact that NGA section 7 authorizes the use of eminent domain, that the Commission had not provided sufficient explanation for why it is lawful to credit precedent agreements with foreign shippers serving customers toward a finding that a pipeline is required by the public convenience and necessity.¹⁶⁸ Here, we affirm the Authorization Order's finding that the Pacific Connector Pipeline is in the public convenience and necessity,¹⁶⁹ a determination which, as discussed above,¹⁷⁰ provides an explanation that the court's sought in *City of Oberlin*.

57. Consistent with the Certificate Policy Statement, the need for and benefits derived from the project are balanced against the adverse impacts on landowners.¹⁷¹ Here, the Commission balanced the concerns of all interested parties and did not give undue weight to the interests of any particular party. Approximately 43.7% of Pacific Connector's pipeline rights-of-way will be collocated or adjacent to existing powerline, road, and pipeline corridors.¹⁷² Approximately 82 miles of the total pipeline right-of-way are on public land (federal or state-owned land), and the remaining 147 miles are on privately owned land.¹⁷³ Of those 147 miles, 60 miles are held by timber companies.¹⁷⁴ On July 29, 2019, Pacific Connector stated that it had negotiated easement agreements from 72 percent of private, non-timber landowners (representing 75% of the mileage from such landowners) and 93% of timber company landowners (representing 92% of the mileage from timber companies). Pacific Connector engaged in public outreach during the

¹⁶⁶ Sierra Club Rehearing Request at 19-20 (citing *City of Oberlin*, 937 F.3d 599).

¹⁶⁷ *Id.*

¹⁶⁸ *City of Oberlin*, 937 F.3d at 607.

¹⁶⁹ Authorization Order, 170 FERC ¶ 61,202 at P 89.

¹⁷⁰ *See supra* PP 37-44.

¹⁷¹ Certificate Policy Statement, 88 FERC at 61,744. *See also National Fuel*, 139 FERC ¶ 61,037 at P 12.

¹⁷² Pacific Connector's September 18, 2019 Revised Plan of Development at 8.

¹⁷³ Final EIS at Table 4.7.2.1-1.

¹⁷⁴ Pacific Connector's July 29, 2019 Land Statistics Update.

Commission's pre-filing process, working with interested stakeholders, soliciting input on route concerns, and assessing route alternatives to address concerns and impacts on landowners and communities.

58. We affirm the Authorization Order's rejection of the argument that issuing a conditional certificate violates the Fifth Amendment.¹⁷⁵ As a certificate holder under section 7(h) of the NGA, Pacific Connector can commence eminent domain proceedings in a court action if it cannot acquire property rights by negotiation. Pacific Connector will not be allowed to construct any facilities on such property unless and until a court authorizes acquisition of the property through eminent domain and there is a favorable outcome on all outstanding requests for necessary approvals. Further, Pacific Connector will be required by the court in any eminent domain proceeding to compensate landowners for any property rights it acquires.¹⁷⁶

59. Sierra Club contends that the Authorization Order failed to condition the use of eminent domain upon Commission staff review of final residential construction plans.¹⁷⁷ Under section 7(h) of the NGA, once a natural gas company obtains a certificate of public convenience and necessity it may exercise the right of eminent domain in a U.S. District Court or a state court, regardless of the status of other authorizations for the project.¹⁷⁸ Any additional measures requested by Sierra Club are unnecessary because the Authorization Order appropriately ensures adequate Commission oversight of construction. For instance, Environmental Condition 5 provides that the authorized facility locations shall be as shown in the Final EIS, as supplemented by filed site plans and alignment sheets, and shall include the route variations identified in the order and conditions and must be filed with the Secretary prior to the start of construction.¹⁷⁹ Environmental Condition 5 also states that "Pacific Connector's exercise of eminent domain authority . . . must be consistent with these authorized facilities and locations."¹⁸⁰ Further, the Authorizing Order notes that Jordan Cove and Pacific Connector shall follow the construction procedures and mitigation measures described in their respective applications and supplemental filings and as identified or modified in the Final EIS and Authorizing Order, unless they receive approval in writing from the Director of the

¹⁷⁵ Authorization Order, 170 FERC ¶ 61,202 at P 101.

¹⁷⁶ *Id.*

¹⁷⁷ Sierra Club Rehearing Request at 35.

¹⁷⁸ 15 U.S.C. § 717f(h).

¹⁷⁹ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 5.

¹⁸⁰ *Id.*

Office of Energy Projects for the use of a modification.¹⁸¹ The Authorization Order also requires Jordan Cove and Pacific Connector to file implementation plans describing how each will implement those construction procedures prior to commencing construction for review and written approval.¹⁸²

60. Sierra Club further contends that the Authorization Order violates the Due Process Clause of the U.S. Constitution because it alleges not all affected landowners were provided a sufficient notice prior to the taking of their property.¹⁸³ Sierra Club appears to conflate the process by which landowners are provided notice that an application for a pipeline certificate is pending at the Commission and their ability to comment on the EIS or the certificate application, and the Due Process rights due to landowners in an eminent domain proceeding in a court. The Commission has no authority to set the notice requirements applicable to eminent domain proceedings. As to the Commission's proceedings, we note that the Commission's regulations require NGA section 7 applicants to demonstrate that they have made "a good faith effort to notify all affected landowners"¹⁸⁴ Pacific Connector has satisfied this requirement.¹⁸⁵ As explained in the Authorization Order, eminent domain power conferred on Pacific Connector under the NGA "requires the company to go through the usual condemnation process, which calls for an order of condemnation and a trial determining just compensation prior to the taking of private property."¹⁸⁶ Further, "if and when the company acquires a right of way through any [landowner's] land, the landowner will be entitled to just compensation, as established in a hearing that itself affords due process."¹⁸⁷

¹⁸¹ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 1.

¹⁸² Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 7.

¹⁸³ Sierra Club Rehearing Request at 42-43.

¹⁸⁴ 18 C.F.R. § 157.6(d) (2019).

¹⁸⁵ Pacific Connection October 23, 2017 Updated Landowner List.

¹⁸⁶ Authorization Order, 170 FERC ¶ 61,202 at PP 95-96 (citing *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at *2 (unpublished) (quoting *Transwestern Pipeline Co., LLC v. 17.19 Acres of Prop. Located in Maricopa Cnty.*, 550 F.3d 770, 774 (9th Cir. 2008))).

¹⁸⁷ *Id.* (quoting *Del. Riverkeeper Network v. FERC*, 895 F.3d 102, 110 (D.C. Cir. 2018)).

61. Finally, Sierra Club argues that the Commission should prohibit “quick take” procedures.¹⁸⁸ “Quick-take” procedures are established by the judiciary as one method for carrying out the right of eminent domain. While Sierra Club alleges various constitutional infirmities with quick-take procedures as a category,¹⁸⁹ the Commission’s has no authority to direct courts how to conduct their proceedings.

7. Balancing of Adverse Impacts

62. Multiple petitioners contend that the Authorization Order violates sections 3 and 7 of the NGA by failing to take into account the adverse environmental impacts of the projects in determining that the projects are consistent with the public interest.¹⁹⁰ Petitioners assert that the Authorization Order’s public interest determination does not take into account the project’s impacts on threatened and endangered species, wildlife, landowners and communities; petitioners further assert that the public interest determination errs by not considering GHG emissions attributable to the project.¹⁹¹ Petitioners contend that in addition to failing to account for environmental impacts, the public interest determination overestimates the need for and benefits of the projects.¹⁹²

63. Regarding the Authorization Order’s public convenience and necessity determination for the Pacific Connector Pipeline under section 7 of the NGA, the petitioners misunderstand the nature of the balancing required by the Certificate Policy Statement. The Certificate Policy Statement’s balancing of adverse impacts and public benefits is an economic test, not an environmental analysis.¹⁹³ Only when the benefits outweigh the adverse effects on the economic interests will the Commission proceed to consider the environmental analysis where other interests are addressed.¹⁹⁴ If a project

¹⁸⁸ Sierra Club Rehearing Request at 35-37.

¹⁸⁹ *Id.* at 36 (citing *Knick v. Twp. of Scott, Penn.*, 139 S.Ct. 2162 (2019)).

¹⁹⁰ Sierra Club Rehearing Request at 22-24; NRDC Rehearing Request at 36-43; State of Oregon Rehearing Request at 29, 46; McCaffree Rehearing Request at 10.

¹⁹¹ NRDC Rehearing Request at 36-43.

¹⁹² McCaffree Rehearing Request at 10-11, Sierra Club Rehearing Request at 22-24; State of Oregon Rehearing Request at 47-48.

¹⁹³ *National Fuel*, 139 FERC ¶ 61,037 at P 12.

¹⁹⁴ Certificate Policy Statement, 88 FERC at 61,745.

satisfies the requirements of the Certificate Policy Statement, a Commission order will consider both economic and environmental issues.

64. In any event, we find that, contrary to the petitioners' assertions, threatened and endangered species,¹⁹⁵ wildlife,¹⁹⁶ landowner and community impacts,¹⁹⁷ and GHG emissions¹⁹⁸ are addressed adequately in the Final EIS, considered in the Authorization Order, and addressed, as necessary, below. Further, as discussed above, we find that there is significant evidence of demand for the project.¹⁹⁹ The Authorization Order found that if the Pacific Connector Pipeline is constructed and operated as described in the Final EIS, the environmental impacts are acceptable considering the public benefits of the project, and determined that the Pacific Connector Pipeline was required by the public convenience and necessity.²⁰⁰ We affirm this finding.

65. In the Authorization Order, the Commission determined that the Jordan Cove LNG Terminal was not inconsistent with the public interest based on *all* information in the record, including information presented in the Final EIS.²⁰¹ Although the Final EIS identifies some adverse environmental impacts, the Commission found that the Jordan Cove LNG Terminal, if constructed and operated as described in the Final EIS with required conditions, is an environmental acceptable action and, consequently, based on all other factors discussed in the Authorization Order, the Jordan Cove LNG Terminal is not inconsistent with the public interest.²⁰² We affirm that decision.

¹⁹⁵ Final EIS at 4-317 to 4-391; *see also infra* PP 217-228.

¹⁹⁶ Final EIS at 4-185 to 4-235; *see also infra* PP 169-179.

¹⁹⁷ Final EIS at 4-420 to 4-686; *see also infra* PP 180-194.

¹⁹⁸ Final EIS at 4-697 to 4-706, 4-849 to 4-851; *see also infra* PP 232-254.

¹⁹⁹ *See supra* PP 28-48.

²⁰⁰ Authorization Order, 170 FERC ¶ 61,202 at P 294.

²⁰¹ *Id.*

²⁰² Authorization Order, 170 FERC ¶ 61,202 at P 294.

V. Environmental Analysis

A. Procedural Issues

1. The Draft EIS Satisfied NEPA Requirements

66. NRDC and Sierra Club argue that the Draft EIS was missing so much relevant information that it “precluded meaningful public participation in the NEPA process.”²⁰³ NRDC states that the Draft EIS lacked “critical information” including staff’s Biological Assessment, mitigation plans, as well as studies and authorizations from other agencies, including ongoing agency consultation.²⁰⁴ Sierra Club asserts that the Commission “chose to rush through the NEPA process” leaving out sufficient information to analyze alternatives to the Pacific Connector Pipeline, as well as the pipeline’s potential impacts on residential wells, and other environmental resources areas.²⁰⁵ Petitioners contend that the Commission’s consideration of comments after the close of the comment period on the Final EIS is insufficient to account for the missing information in the Draft EIS, as it did not lead to the same amount of public participation,²⁰⁶ and the Final EIS does not benefit from responses to these comments.²⁰⁷ As a result, Sierra Club calls for the Commission to issue a revised Draft EIS, with a new opportunity for comment.²⁰⁸

67. We disagree that the Draft EIS did not satisfy NEPA. The Draft EIS is a draft of the agency’s proposed Final EIS and, as such, its purpose is to elicit suggestions for change.²⁰⁹ A draft is adequate when it allows for “meaningful analysis” and “make[s] every effort to disclose and discuss” “major points of view on the environmental impacts.”²¹⁰ Although NRDC and Sierra Club identified that some information was

²⁰³ NRDC Rehearing Request at 56-58; Sierra Club Rehearing Request at 37-41.

²⁰⁴ NRDC Rehearing Request at 56.

²⁰⁵ Sierra Club Rehearing Request at 39-40.

²⁰⁶ *Id.* at 41.

²⁰⁷ NRDC Rehearing Request at 57.

²⁰⁸ Sierra Club Rehearing Request at 41.

²⁰⁹ *City of Grapevine v. U.S. Dep’t of Transp.*, 17 F.3d 1502, 1507 (D.C. Cir. 1994) (*City of Grapevine*).

²¹⁰ 40 C.F.R. § 1502.9(a) (2019); *see also Nat’l Comm. for the New River v. FERC*, 373 F.3d 1323, 1328 (D.C. Cir. 2004) (*New River*) (holding that the Commission’s Draft EIS was adequate even though it did not have a site-specific

missing from the Draft EIS, they have not demonstrated that this renders the Draft EIS inadequate by these standards. Nor have NRDC or Sierra Club shown that “omissions in the [Draft EIS] left the public unable to make known its environmental concerns about the project’s impact.”²¹¹

68. NRDC and Sierra Club err in claiming that the Draft EIS, the Final EIS, or Authorization Order, were required to include complete, finalized mitigation plans.²¹² The Supreme Court has held “that NEPA does not require a fully developed plan detailing what steps *will* be taken to mitigate adverse environmental impacts”²¹³ Here, as the Commission stated in the Authorization Order, Commission staff published a Final EIS that identifies baseline conditions for all relevant resources.²¹⁴ Later-filed mitigation plans will not present new environmentally-significant information nor pose substantial changes to the proposed action that would otherwise require a supplemental EIS. Moreover, as we have explained in other cases, practicalities require the issuance of certificate authorizations before completion of certain reports and studies because large projects, such as this, take considerable time and effort to develop.²¹⁵ Perhaps more important, their development is subject to many variables whose outcomes cannot be predetermined. And, as the Commission has found elsewhere, in some instances, the certificate holder may need to access property in order to acquire the necessary information.²¹⁶ Accordingly, post-certification studies may properly be used to develop

crossing plan for a major waterway where the proposed crossing method was identified and thus provided “a springboard for public comment”).

²¹¹ *Sierra Club, Inc. v. U.S. Forest Serv.*, 897 F.3d 582, 598 (4th Cir. 2018) (rejecting petitioners claim that the Commission’s draft environmental impact statement precluded meaningful comment where the applicant had not yet filed an erosion and sediment control plan at the time the draft EIS was published) (citing *New River*, 373 F.3d at 1329).

²¹² See, e.g., NRDC Rehearing Request at 56; Sierra Club Rehearing Request at 40-41.

²¹³ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 359 (1989) (emphasis in original).

²¹⁴ Authorization Order, 170 FERC ¶ 61,202 at P 160.

²¹⁵ See, e.g., *Algonquin Gas Transmission, LLC*, 154 FERC ¶ 61,048, at P 94 (2016); *E. Tenn. Natural Gas Co.*, 102 FERC ¶ 61,225, at P 23 (2003), *aff’d sub nom.*, *New River*, 373 F.3d 1323.

²¹⁶ *Midwestern Gas Transmission Co.*, 116 FERC ¶ 61,182, at P 92 (2006).

site-specific mitigation measures. It is not unreasonable for the Final EIS to deal with sensitive locations in a general way, leaving specificities of certain resources for later exploration during construction.²¹⁷ What is important is that the agency make adequate provisions to assure that the certificate holder will undertake and identify appropriate mitigation measures to address impacts that are identified during construction.²¹⁸ We have and will continue to demonstrate our commitment to assuring adequate mitigation.²¹⁹

69. Moreover, while the Draft EIS serves as “a springboard for public comment,”²²⁰ any information that is filed after the comment period is available in the Commission’s public record, including through its electronic database, eLibrary.²²¹ Further, the Authorization Order noted that comments filed on the Draft EIS were addressed in the Final EIS “to the extent practicable,”²²² and comments on the Final EIS were addressed in the Authorization Order.

70. To the extent Sierra Club and Ms. McCaffree claim that the Commission was required to issue a revised Draft EIS, they are mistaken.²²³ As the Supreme Court has stated, “an agency need not supplement an EIS every time new information comes to light after the EIS is finalized.”²²⁴

71. NEPA requires the revision or supplement of a draft (or final) EIS only where the agency makes “substantial changes in the proposed action,” or if there are “significant new circumstances or information relevant to environmental concerns.”²²⁵ Sierra Club has not demonstrated that either of these scenarios occurred. The Final EIS analyzes the relevant environmental information and recommended environmental conditions. In the

²¹⁷ *Mojave Pipeline Co.*, 45 FERC ¶ 63,005, at 65,018 (1988).

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ *See Robertson*, 490 U.S. at 349.

²²¹ The eLibrary system offers interested parties the option of receiving automatic notification of new filings.

²²² Authorization Order, 170 FERC ¶ 61,202 at n.266.

²²³ Sierra Club Rehearing Request at 41; McCaffree Rehearing Request at 15.

²²⁴ *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 373 (1989).

²²⁵ 40 C.F.R. § 1502.9(c)(1) (2019).

Authorization Order, we adopted the recommended environmental conditions and further responded to comments, including those filed after the Final EIS.²²⁶ In short, the Commission's procedures, consistent with NEPA and the NGA, allowed the public a meaningful opportunity to comment and resulted in an informed Commission decision.

72. NRDC contends that the Commission improperly issued the Draft EIS and Final EIS prior to completing consultation with the National Marine Fisheries Service (NMFS), Indian tribes, and the Oregon State Historic Preservation Office (SHPO), among other agencies and entities.²²⁷ NRDC argues that the Commission's failure to complete the consultation process for inclusion in either the Draft or Final EIS "falls short of reasoned decision making under NEPA" and fails to promote "active public involvement and access to information" as required by NEPA.²²⁸ Sierra Club claims that the Commission should have gathered all information before issuing a Draft EIS.²²⁹

73. Both the Draft and Final EIS contain extensive discussion regarding the potential impacts on federally-listed threatened and endangered species, marine mammals²³⁰ and cultural resources.²³¹ As we explain above and in other cases,²³² practicalities require the issuance of orders before completion of certain reports and studies because large projects, such as this, take considerable time and effort to develop. Accordingly, the Commission's process "to the fullest extent possible,"²³³ reflects the integration of the Commission's Draft EIS with the NMFS and SHPO consultation processes. As courts have recognized, NEPA's requirements are essentially procedural;²³⁴ if the agency's

²²⁶ Authorization Order, 170 FERC ¶ 61,202 at P 293.

²²⁷ NRDC Rehearing Request at 57.

²²⁸ *Id.* (citing *Price Road Neighborhood Ass'n v. U.S. Dept. of Transp.*, 113 F.3d 1505, 1511 (9th Cir. 1997)).

²²⁹ Sierra Club Rehearing Request at 41.

²³⁰ See Draft EIS at 4-229 to 4-309; Final EIS at 4-235 to 4-317.

²³¹ See Draft EIS at 4-632 to 4-655; Final EIS at 4-663 to 4-686.

²³² See, e.g., *Weaver's Cove Energy, LLC*, 114 FERC ¶ 61,058, at PP 108-115 (2006); *Islander E. Pipeline Co.*, 102 FERC ¶ 61,054, at PP 41-44 (2003).

²³³ 40 C.F.R. § 1502.9(a) (2019).

²³⁴ *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978) (*Vermont Yankee*).

decision is fully informed and well-considered, the Commission has satisfied its NEPA responsibilities.²³⁵ The Commission’s approach is fully consistent with NEPA, as affirmed in *National Committee for New River v. FERC*,²³⁶ where the D.C. Circuit recognized that “if every aspect of the project were to be finalized before any part of the project could move forward, it would be difficult, if not impossible, to construct the project.”²³⁷

B. Conditional Certificates

74. Several petitioners allege that the Commission’s conditional authorization of the projects pending receipt of all applicable federal and state approvals, including the Coastal Zone Management Act (CZMA),²³⁸ the Clean Water Act (CWA),²³⁹ and the Clean Air Act (CAA),²⁴⁰ is unlawful.²⁴¹

75. Under Environmental Conditions 11 and 27 of the Authorization Order, Jordan Cove and Pacific Connector cannot commence construction of any project facilities without first filing documentation either that they have received “all applicable authorizations required under federal law,” including under the CZMA, CWA, and CAA, or that such authorizations have been waived.²⁴² This conditional authorization is a reasonable exercise of the Commission’s broad authority to condition certificates for interstate pipelines on “such reasonable terms and conditions as the public convenience

²³⁵ *Natural Res. Def. Council, Inc. v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988).

²³⁶ 373 F.3d 1323 (D.C. Cir. 2004).

²³⁷ *Id.* at 1329 (quoting *E. Tenn. Natural Gas Co.*, 102 FERC ¶ 61,225 at P 25) (internal quotations omitted).

²³⁸ 16 U.S.C. § 1456(c)(3)(A) (2018).

²³⁹ 33 U.S.C. § 1341(a)(1) (2018).

²⁴⁰ 42 U.S.C. § 7401 et seq. (2018).

²⁴¹ With regard to the CZMA, *see, e.g.*, Confederated Tribes Rehearing Request at 31-33; State of Oregon Rehearing Request at 25-26; Sierra Club Rehearing Request at 25-27. With regard to the CWA, *see, e.g.*, McCaffree Rehearing Request at 12-13, 17-18; State of Oregon Rehearing Request at 14-24; Sierra Club Rehearing Request at 25-27. With regard to the CAA, *see, e.g.*, State of Oregon Rehearing Request at 24.

²⁴² Authorization Order, 170 FERC ¶ 61,202, app., envtl. conditions 11, 27.

and necessity may require.”²⁴³ As discussed in the Authorization Order and in more detail below, the Commission’s practice of issuing conditional certificates has consistently been affirmed by courts as lawful.²⁴⁴

1. Coastal Zone Management Act

76. As noted by the petitioners, the CZMA provides in pertinent part that that “[n]o license or permit shall be granted by [a] Federal agency until the state or its designated agency has concurred with the applicant’s certification” that “the proposed activity complies with the enforceable policies of the state’s approved [coastal management] program and that such activity will be conducted in a manner consistent with the program.”²⁴⁵

77. The Jordan Cove LNG Terminal and a portion of the Pacific Connector Pipeline will be constructed within a designated coastal zone, and accordingly, the projects are subject to a consistency review under the CZMA.²⁴⁶ As stated in the Authorization Order, on April 11, 2019, Jordan Cove and Pacific Connector submitted joint CZMA certification to the Oregon Department of Land Conservation and Development (Oregon DLCD).²⁴⁷ On February 19, 2020, Oregon DLCD objected to the applicants’ consistency certification on the basis that the applicants have not established consistency with specific

²⁴³ 15 U.S.C. § 717f(e); *see also, e.g., ANR Pipeline Co. v. FERC*, 876 F.2d 124, 129 (D.C. Cir. 1989) (noting the Commission’s “extremely broad” conditioning authority).

²⁴⁴ Authorization Order, 170 FERC ¶ 61,202 at P 192 (citing *Del. Riverkeeper Network v. FERC*, 857 F.3d 388, 399 (D.C. Cir. 2017) (upholding Commission’s approval of a natural gas project conditioned on securing state certification under section 401 of the Clean Water Act); *see also Myersville*, 783 F.3d at 1320-21 (upholding the Commission’s conditional approval of a natural gas facility construction project where the Commission conditioned its approval on the applicant securing a required federal CAA air quality permit from the state); *Pub. Utils. Comm’n. of State of Cal. v. FERC*, 900 F.2d 269, 282 (D.C. Cir. 1990) (holding the Commission had not violated NEPA by issuing a certificate conditioned upon the completion of the environmental analysis)).

²⁴⁵ 16 U.S.C. § 1456(c)(3)(A) (2018).

²⁴⁶ Authorization Order, 170 FERC ¶ 61,202 at P 230.

²⁴⁷ *Id.* P 231.

enforceable policies of the Oregon Coastal Management Program and that they are not supported by adequate information.²⁴⁸

78. The Commission noted in the Authorization Order that Oregon DLCD's objection appeared to be without prejudice and that the objection could be appealed to the U.S. Secretary of Commerce.²⁴⁹ Accordingly, the Authorization Order required, in Environmental Condition 27, that prior to beginning construction, Jordan Cove and Pacific Connector must file a determination of consistency with the Coastal Zone Management Plan issued by the State of Oregon.²⁵⁰ The Commission also explained in the Authorization Order that the Commission's practice of issuing conditional certificates has consistently been upheld by courts and that Jordan Cove and Pacific Connector would not be permitted to begin construction until they receive all necessary authorizations.²⁵¹

79. Petitioners allege that our conditional authorization of the projects was unlawful and that the Commission is prohibited from approving the projects until the state has provided a concurrence with the consistency determination pursuant to the CZMA.²⁵² In addition, Sierra Club contends that requiring compliance with the CZMA prior to issuance of a notice permitting construction to begin, as opposed to issuance of the Authorization Order, limits the state's ability to participate in the process or impose meaningful conditions on projects.²⁵³ Sierra Club further argues that issuance of a conditional authorization for these particular projects was inappropriate given that the

²⁴⁸ *Id.*

²⁴⁹ *Id.* The CZMA provides that, when a state objects to a consistency certification, the applicant may appeal the objection to the Secretary of Commerce by filing a notice of appeal within 30 days of receipt of the objection. Following the appeal, the Secretary of Commerce may override a state objection to a consistency certification. 16 U.S.C. § 1456(c)(3)(A) (2018).

²⁵⁰ Authorization Order, 170 FERC ¶ 61,202 at P 231 & app., envtl. condition 27.

²⁵¹ *Id.* PP 191-192 & app., envtl. condition 11.

²⁵² Confederated Tribes Rehearing Request at 32-33; Cow Creek Rehearing Request at 26-28 (addressing Cow Creek's arguments as to the Pacific Connector Pipeline); Sierra Club Rehearing Request at 25-27; State of Oregon Rehearing Request at 25-26; McCaffree Rehearing Request at 11-12.

²⁵³ Sierra Club Rehearing Request at 26.

state had already objected to the CZMA consistency certifications.²⁵⁴ Additionally, Ms. McCaffree states that because Oregon DLCDC found that the projects' impacts violated the state's coastal program, the Commission cannot ignore and must consider those effects in making its determination.²⁵⁵ Last, in their request for rehearing, Jordan Cove and Pacific Connector request clarification that Environmental Condition 27 could be satisfied if they submit a determination by the Secretary of Commerce that the activity is consistent with the objectives of the CZMA or is otherwise necessary in the interest of national security.²⁵⁶

80. As we explained above and in the Authorization Order, the Commission's practice of issuing conditional certificates has consistently been affirmed by courts as lawful,²⁵⁷ including specifically the Commission's issuance of certificates conditioned on future state approval pursuant to the CZMA.²⁵⁸ The Commission's approach is a practical response to the reality that it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission's issuance of its certificate without unduly delaying a project.²⁵⁹

²⁵⁴ *Id.* at 26-27.

²⁵⁵ McCaffree Rehearing Request at 12, 15-17.

²⁵⁶ Jordan Cove and Pacific Connector Rehearing Request at 25-27.

²⁵⁷ *See supra* P 76 & note 244.

²⁵⁸ Authorization Order, 170 FERC ¶ 61,202 at P 192 (citing *Del. Dep't. of Nat. Res. & Env'tl. Control v. FERC*, 558 F.3d 575, 578-79 (D.C. Cir. 2009) (holding Delaware suffered no concrete injury from the Commission's conditional approval of a natural gas terminal construction despite statutes requiring states' prior approval because the Commission conditioned its approval of construction on the states' prior approval)). Confederated Tribes contends that the court's decision in *Mountain Rhythm Res. v. FERC*, 302 F.3d 958 (9th Cir. 2002) undermines the Commission's interpretation of its conditional approval authority under the Natural Gas Act. But that case is inapposite: there, the court addressed whether the Commission reasonably relied on maps created by the National Oceanic and Atmospheric Administration in determining that a project was in a coastal zone. *Id.* at 965.

²⁵⁹ Authorization Order, 170 FERC ¶ 61,202 at P 192 (citing *Broadwater Energy LLC*, 124 FERC ¶ 61,225, at P 59 (2008) (*Broadwater*); *Crown Landing LLC*, 117 FERC ¶ 61,209, at P 26 (2006) (*Crown Landing*); *Millennium*, 100 FERC ¶ 61,277 at PP 225-231).

81. Moreover, as we have previously explained, we see “no inherent conflict between the CZMA . . . and the NGA given the Commission’s multi-faceted duties regarding LNG importation, the flexibility provided by implementing regulations issued by other agencies, and the courts’ practical and reasonable decisions allowing statutes to operate together successfully.”²⁶⁰ Further,

[f]or the Commission to deny NGA section 3 authorization . . . because a state’s certification or concurrence under the CZMA . . . is pending at the state level or on appeal in a state or federal court . . . would require [a project proponent] to begin again the complex, time-consuming, and expensive application process when and if the CZMA . . . issues are resolved. This would be needlessly inefficient and contrary to the energy needs of our nation. Our practice of approving projects with conditions precluding construction pending the applicant’s compliance with the CZMA . . . is far more consistent with both Congressional expectations and relevant agency regulations.²⁶¹

82. We also disagree with Sierra Club’s contention that this practice limits a state’s ability to participate in the process. As stated previously and throughout the Authorization Order, the applicants must receive all necessary approvals, including authorizations federally delegated to the states, (or evidence of waiver thereof) prior to beginning construction.²⁶² Accordingly, the Authorization Order does not narrow the state’s authorities delegated to it under the relevant statutes.²⁶³

83. Nor do we find that issuance of a conditional authorization in this case was inappropriate given that the state had objected to the consistency determination. In *Broadwater Energy LLC*, the Commission rejected similar arguments that it should vacate or withdraw its authorizations for the Broadwater Pipeline and Broadwater Energy import terminal because the State of New York objected to the project proponents’ consistency determination shortly after the Commission issued its authorization order.²⁶⁴ The Commission explained in its rehearing order that it was not required to vacate the

²⁶⁰ *Crown Landing*, 117 FERC ¶ 61,209 at P 27.

²⁶¹ *Id.* P 29.

²⁶² Authorization Order, 170 FERC ¶ 61,202, app., envtl. condition 11.

²⁶³ *See Broadwater*, 124 FERC ¶ 61,225 at P 58.

²⁶⁴ *Id.* P 66.

approval because the project proponent had appealed the state's finding to the Secretary of Commerce and the Commission would not authorize construction unless the state's objection was overridden.²⁶⁵ On March 16, 2020, Jordan Cove and Pacific Connector appealed to the Secretary of Commerce.²⁶⁶

84. Relatedly, pursuant to Jordan Cove and Pacific Connector's request, we clarify that if the Secretary of Commerce overrides the state's determination, filing the Secretary's decision would satisfy Environmental Condition 27. The CZMA is a federal statute, implementation of which has been delegated to the states to make the concurrence determination in the first instance. Pursuant to the language of the CZMA, the Secretary of Commerce retains authority to override a state's decision.²⁶⁷

85. Last, we note, contrary to Ms. McCaffree's claim, that the Commission fully considered the environmental effects associated with the projects in the Authorization Order, including those effects that were the basis for Oregon DLCD's objections. For clarity, in multiple instances, the Authorization Order notes the Oregon DLCD's concerns, so that the state's analysis could be contrasted with that of the Commission.²⁶⁸

2. Clean Water Act

86. Section 401(a)(1) of the CWA provides that an applicant for a federal license to conduct an activity that "may result in any discharge into the navigable waters" must obtain a water quality certification from the state and, further, that "[n]o license or permit shall be granted until the certification required by the section has been obtained or has

²⁶⁵ *Id.*

²⁶⁶ See Jordan Cove and Pacific Connector's April 3, 2020 Notice of Appeal filed in Docket Nos. CP17-494-000 and CP17-495-000.

²⁶⁷ 16 U.S.C. § 1456(c)(3)(A) (2018) ("No license or permit shall be granted by the Federal agency until the state or its designated agency has concurred with the applicant's certification or until, by the state's failure to act, the concurrence is conclusively presumed, *unless the Secretary, on his own initiative or upon appeal by the applicant, finds, after providing a reasonable opportunity for detailed comments from the Federal agency involved and from the state, that the activity is consistent with the objectives of this chapter or is otherwise necessary in the interest of national security.*") (emphasis added).

²⁶⁸ See, e.g., Authorization Order, 170 FERC ¶ 61,202 at P 206, n.414.

been waived ...” and “[n]o license or permit shall be granted if certification has been denied”²⁶⁹

87. The State of Oregon, Jordan Cove, and Pacific Connector dispute whether and when Oregon DEQ received Jordan Cove’s and Pacific Connector’s requests for water quality certifications with regard to Commission-jurisdictional activities.²⁷⁰ On May 6, 2019, Oregon DEQ issued a denial of Jordan Cove’s and Pacific Connector’s requests for certification, which Oregon DEQ linked to a subset of activities under the jurisdiction of the U.S. Army Corps of Engineers (Army Corps).²⁷¹ Oregon DEQ issued the denial without prejudice and specifically allowed Jordan Cove and Pacific Connector to reapply.²⁷²

88. In the Authorization Order, the Commission explained that Jordan Cove and Pacific Connector will be unable to exercise the authorizations to construct and operate the projects until they receive all necessary authorizations, including under the CWA, or provide evidence of waiver.²⁷³ The Commission explained that such conditional authorization is permitted, citing *Delaware Riverkeeper Network v. FERC*, which upheld the Commission’s use of conditional authorizations before other authorizations under federal law are complete.²⁷⁴

89. On rehearing, the State of Oregon offers two reasons to distinguish the court’s decision in *Delaware Riverkeeper Network v. FERC*.²⁷⁵ First, the State of Oregon maintains that before the Commission issued its Authorization Order, Oregon DEQ had already timely denied the requests for certification, the applicants had not appealed, and

²⁶⁹ 33 U.S.C. § 1341(a)(1) (2018).

²⁷⁰ *E.g.*, State of Oregon Rehearing Request at 18 (asserting that Oregon DEQ received applications for a 401 certification for activities to be authorized by the Corps but not for activities to be authorized by the Commission); Oregon DEQ May 7, 2019 Denial of 401 Water Quality Certification at 3 (same).

²⁷¹ Oregon DEQ May 7, 2019 Denial of 401 Water Quality Certification at 3.

²⁷² *Id.* at 3, 85.

²⁷³ Authorization Order, 170 FERC ¶ 61,202 at PP 191-192 & app., envtl. condition 11.

²⁷⁴ 857 F.3d 388 (D.C. Cir. 2017); *see* Authorization Order, 170 FERC ¶ 61,202 at P 192, n.371.

²⁷⁵ State of Oregon Rehearing Request at 18-19.

the applicants had not re-applied.²⁷⁶ Sierra Club takes a similar position, adding that Jordan Cove and Pacific Connector have not made any serious effort to satisfy Environmental Condition 11 because they have not indicated when or if they will re-apply for certification.²⁷⁷ Ms. McCaffree states that the Commission has failed its obligation to assess and determine whether, given the projects' adverse impacts, obtaining the section 401 certification is feasible.²⁷⁸

90. Second, the State of Oregon asserts that Environmental Condition 11 fails to assure the result that the court relied upon in *Delaware Riverkeeper Network v. FERC*, i.e., that there will be no activity that may result in any discharge into the navigable waters before a valid water quality certification or a waiver is in place, because the Authorization Order granted Pacific Connector's request for a blanket construction certificate.²⁷⁹ Oregon DEQ asserts that the Commission's regulations presume that an activity under a blanket construction certificate complies with the CWA if the certificate-holder adheres to Commission staff's *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan) and *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures) or an approved project-specific alternative.²⁸⁰ The State of Oregon contends that although the Plan and Procedures are designed to reduce or mitigate discharges to waters, they do not prohibit discharges and they do not substitute for effluent limitations or water quality standards overseen by the state under the CWA.²⁸¹ The State of Oregon similarly states that Environmental Condition 11's prohibition on "commencing construction ... including any tree-felling or ground-disturbing activities" neither prevents discharges from existing conveyances such as the use of existing stormwater systems, road culverts, herbicide application, and other point sources nor does it prevent the discharge from the removal of riparian vegetation in the form of increased heat loading to streams.²⁸²

91. There is no material distinction between the Authorization Order and the Commission's prior conditional order reviewed and upheld in *Delaware Riverkeeper*

²⁷⁶ *Id.* at 19.

²⁷⁷ Sierra Club Rehearing Request at 26-27.

²⁷⁸ McCaffree Rehearing Request at 12-13, 17-18.

²⁷⁹ State of Oregon Rehearing Request at 20.

²⁸⁰ *Id.* (citing 18 C.F.R. § 157.206(b)(3)(iv) (2019)).

²⁸¹ *Id.* at 20.

²⁸² *Id.* at 21-22.

Network v. FERC. At the time of the Commission’s Authorization Order, Oregon DEQ had denied the requests for water quality certification, the applicants had not appealed, and the applicants had not indicated when or if they will re-apply. Jordan Cove and Pacific Connector were free to choose whether to pursue their interests by appealing the denials, by re-applying, or by presenting evidence of waiver directly to the Commission to obtain further authorization to commence construction.²⁸³ On April 21, 2020, Jordan Cove and Pacific Connector filed a petition for a declaratory order from the Commission seeking a finding that Oregon DEQ waived the section 401 certification requirement by failing to act by the deadline in section 401.²⁸⁴ The Commission will respond to Jordan Cove’s and Pacific Connector’s petition in a separate order in new sub-docket numbers CP17-494-003 and CP17-495-003.²⁸⁵

92. We disagree with the State of Oregon’s contention that granting Pacific Connector’s request for a blanket certificate could result in an activity that may cause a discharge into the navigable waters before it obtains a valid water quality certification or a waiver thereof. The Commission’s blanket certificate regulations include environmental conditions that require pipeline companies, prior to commencing construction, to comply with numerous environmental laws enforced by other agencies to ensure that sensitive environmental areas will not be adversely impacted by any

²⁸³ See *Millennium Pipeline Co., L.L.C. v. Seggos*, 860 F.3d 696, 700 (D.C. Cir. 2017). The courts have explained that “[o]nce the Clean Water Act’s requirements have been waived, the Act falls out of the equation.” *Id.* at 700. If the state has failed to act by the deadline in section 401, the state’s later denial of the request has “no legal significance.” *Id.* at 700-01 (declining the project sponsor’s request that the court set a deadline for agency action, explaining that after waiver “there is nothing left for the [agency] ... to do” and “the [agency’s] decision to grant or deny would have no legal significance”); see also *Weaver’s Cove Energy, LLC v. R.I. Dep’t of Env’tl. Mgmt.*, 524 F.3d 1330, 1333 (D.C. Cir. 2008) (explaining that after waiver, states’ preliminary decisions under section 401 “would be too late in coming and therefore null and void”). Accordingly, a state’s denial of certification does not preclude an applicant from later initiating a proceeding to find waiver. *Constitution Pipeline Co., LLC*, 169 FERC ¶ 61,199, at P 8 (2019).

²⁸⁴ Jordan Cove and Pacific Connector, Petition for Declaratory Order, Docket Nos. CP19-494-003, CP17-495-003 (filed April 21, 2020); see 33 U.S.C. § 1341(a)(1) (2018) (“If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application.”).

²⁸⁵ See *Notice of Petition for Declaratory Order*, 85 Fed. Reg. 27,736 (May 11, 2020).

construction activities, including activities under the automatic provisions, that will involve ground disturbance or changes to operational air and noise emissions.²⁸⁶ Specifically, section 157.206(b)(2)(i) of our regulations would require Pacific Connector to be in compliance with the CWA and its implementing regulations and plans before acting under its blanket certificate.²⁸⁷ As noted by the State of Oregon,²⁸⁸ Pacific Connector could show compliance with section 157.206(b)(2)(i) if it adheres to Commission staff's current Plan and Procedures,²⁸⁹ which require the project sponsor to apply for and obtain an individual or generic CWA section 401 water quality certification or waiver thereof, prior to commencing any activity under the blanket certificate.²⁹⁰ Accordingly, we dismiss the State of Oregon's argument because Pacific Connector must be compliant with the CWA before it can perform any activity under its blanket certificate.²⁹¹

²⁸⁶ 18 C.F.R. § 157.206(b) (2019) (requiring a company planning to undertake construction activities under its Part 157 blanket certificate to obtain any necessary permits or approvals needed pursuant to "following statutes and regulations or compliance plans developed to implement these statutes": the Clean Water Act, Clean Air Act, National Historic Preservation Act, Archeological and Historic Preservation Act, Coastal Zone Management Act, Endangered Species Act, Wild and Scenic Rivers Act, National Wilderness Act, National Parks and Recreation Act, the Magnuson-Stevens Fishery Conservation and Management Act, and executive orders requiring evaluation of the potential effects of actions on floodplains and wetlands).

²⁸⁷ 18 C.F.R. § 157.206(b)(2)(i) (2019); *see* Office of Energy Projects, *Guidance Manual for Environmental Report Preparation*, Vol. I at 7-1 to 7-12 (Feb. 2017) (discussing the regulatory structure for activities under blanket certificates), <https://www.ferc.gov/industries/gas/enviro/guidelines/guidance-manual-volume-1.pdf>.

²⁸⁸ State of Oregon Rehearing Request at 21.

²⁸⁹ 18 C.F.R. § 157.206(b)(3)(iv) (2019).

²⁹⁰ Commission's *Upland Erosion Control, Revegetation and Maintenance Plan* (May 2013) <https://www.ferc.gov/industries/gas/enviro/plan.pdf>. (Plan); Commission's *Wetland and Waterbody Construction and Mitigation Procedures* at 7 (May 2013), <https://www.ferc.gov/industries/gas/enviro/guidelines/wetland-pocket-guide.pdf> (Procedures).

²⁹¹ If Pacific Connector cannot demonstrate compliance with CWA section 401 prior to performing an activity under its blanket certificate, then Pacific Connector must seek a new case-specific NGA section 7 certificate for that activity. *See, e.g., Kern River Gas Transmission Co.*, 98 FERC ¶ 62,040, at 64,071 (2002) (project sponsor requested case-specific NGA section 7 certificate for its project because it could not ensure

93. Turning to the State of Oregon’s argument that Environmental Condition 11 is inadequate because it only requires that Jordan Cove and Pacific Connector file documentation about authorizations required under federal law (or evidence of waiver thereof) but does not expressly require that the Commission or the Director of the Office of Energy Projects affirmatively determine that the authorizations are valid or determine that waiver has occurred.²⁹² The State of Oregon is concerned that Environmental Condition 11 gives no indication about the standard or process to determine waiver and that there would be no final order to challenge if the state wishes to contest the validity of filed documentation.²⁹³

94. Pursuant to Environmental Condition 11 and other conditions, Jordan Cove and Pacific Connector may not commence construction until they first receive written authorizations from the Director of the Commission’s Office of Energy Projects. The Director will only authorize the commencement of construction when the applicants have demonstrated compliance with all applicable conditions.²⁹⁴ Should Jordan Cove and Pacific Connector file documentation to satisfy Environmental Condition 11, these filings will appear in the Commission’s online eLibrary as part of the public record for this proceeding. Any authorization to commence construction is a final agency action, and a party aggrieved by such a decision can pursue rehearing under section 19 of the NGA.²⁹⁵ At that time, a party may challenge the applicants’ compliance with Environmental Condition 11 and may challenge the Director’s stated reasoning and conclusions. Here Jordan Cove and Pacific Connector have now petitioned for a declaratory order on the question of waiver.²⁹⁶ Any person that intervened in the proceedings under NGA section 3 and section 7 is already a party to the proceeding for the petition.²⁹⁷ The

consistency with the Endangered Species Act, as required by section 157.206(b)(2)(vi) of the Commission’s regulations); *El Paso Natural Gas Co*, 94 FERC ¶ 61,403, at 62,501 (2001) (project sponsor requested case-specific NGA section 7 certificate for its project because it could not ensure consistency with the National Historic Preservation Act, as required by section 157.206(b)(2)(iii) of the Commission’s regulations).

²⁹² State of Oregon Rehearing Request at 21.

²⁹³ *Id.*

²⁹⁴ *See, e.g.*, Authorization Order, 170 FERC ¶ 61,202 at P 293.

²⁹⁵ 15 U.S.C. § 717r (2018).

²⁹⁶ *See Notice of Petition for Declaratory Order* (May 5, 2020) (Docket Nos. CP17-494-003, CP17-495-003).

²⁹⁷ *Id.* at 1 n.1.

Commission's response to the petition will be subject to rehearing. Finally, petitioners assert that the conditional authorization undermines state authority under the CWA. The State of Oregon contends that the statement in the NGA that "nothing in this Act affects the rights of States" under the CWA,²⁹⁸ includes the significant right to issue a water quality certification before the relevant federal license or permit.²⁹⁹ The State of Oregon emphasizes Congress's "clearly stated intent" to avoid the inefficient outcome that a state's later denial will nullify the Commission's authorization or that a state's later certification, which may include terms and conditions that affect the design or siting of a facility, will force the applicant to return to the Commission to amend its authorization.³⁰⁰ Sierra Club asserts that requiring compliance with the CWA prior to issuance of an order authorizing the start of construction, as opposed to issuance of the Authorization Order, limits the state's ability to participate in the process or to impose meaningful conditions on projects.³⁰¹ Ms. McCaffree asserts that the Commission cannot overrule the state's denial and cannot waive federal CWA standards.³⁰²

95. As is true with respect to the CZMA, the Commission's conditional authorization does not undermine state authority under the CWA and does not limit a state's ability to participate in the process. The practice of issuing conditional authorizations for natural gas projects, when necessary, is a safeguard against inefficient outcomes. The Commission's approach is a practical response to the reality that it may be impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission's issuance of its certificate without unduly delaying a project.³⁰³ This approach is far more consistent with both Congressional expectations and relevant agency regulations than if the Commission failed to make timely decisions on matters related to its NGA jurisdiction that will inform project sponsors and other licensing agencies, as well as

²⁹⁸ State of Oregon at 23 (quoting section 3(d) of the NGA, 15 U.S.C. § 717b(d) (2018)).

²⁹⁹ *Id.* at 23.

³⁰⁰ *Id.* at 23-24.

³⁰¹ *Id.* at 23-24; Sierra Club Rehearing Request at 26.

³⁰² McCaffree Rehearing Request at 12, 17.

³⁰³ Authorization Order, 170 FERC ¶ 61,202 at P 192 (citing *Broadwater*, 124 FERC ¶ 61,225 at P 59; *Crown Landing*, 117 FERC ¶ 61,209 at P 26; *Millennium*, 100 FERC ¶ 61,277 at PP 225-231).

the public.³⁰⁴ The conditioned Authorization Order fully protects the authority delegated to Oregon under the CWA. It requires that the applicants receive the necessary state approval, or prove waiver, prior to construction and the resulting impacts to the navigable waters in the state. The conditioned Authorization Order does not impact any substantive determinations that need to be made by Oregon DEQ under the CWA. Oregon DEQ retains full authority to grant or deny the specific requests. The Commission has no authority to modify or reject the terms and conditions imposed by a state's water quality certification, and the Commission has no authority to overrule a state's denial absent waiver.³⁰⁵

3. Clean Air Act

96. The State of Oregon argues that the Commission could not issue the Authorization Order until applicants obtained a pre-construction authorization, known as an Air Contaminant Discharge Permit, pursuant to Title V of the Clean Air Act.³⁰⁶ The State of Oregon also claims that Environmental Condition 11 is inadequate because it should have required that the applicants receive all necessary federal authorizations, including the Clean Air Act Title V Operating Permit, needed for operation of the projects before either begins operation.³⁰⁷

97. The Commission appropriately conditioned its authorization on Jordan Cove and the Pacific Connector obtaining required federal authorizations. Jordan Cove and Pacific Connector indicated that they would obtain the Air Contaminant Discharge Permit before beginning construction.³⁰⁸ As discussed, the Commission may issue conditional

³⁰⁴ See e.g., *Broadwater*, 124 FERC ¶ 61,225 at P 59; *Crown Landing*, 117 FERC ¶ 61,209 at P 29.

³⁰⁵ E.g., *City of Tacoma, Wash. v. FERC*, 460 F.3d 53, 67-68 (D.C. Cir. 2006) (“FERC’s role is limited to awaiting, and then deferring to, the final decision of the state. Otherwise, the state’s power to block the project would be meaningless. . . . If the question regarding the state’s section 401 certification is not the application of state water quality standards but compliance with the terms of section 401, then FERC must address it.”); *accord Am. Rivers, Inc. v. FERC*, 129 F.3d 99, 107-111 (2d Cir. 1997).

³⁰⁶ State of Oregon Rehearing Request at 24.

³⁰⁷ *Id.* at 24-25.

³⁰⁸ See Final EIS at 1-25.

authorizations,³⁰⁹ courts have specifically affirmed the Commission's issuance of certificates conditioned on future state approval pursuant to the Clean Air Act.³¹⁰

98. We decline to adopt the State of Oregon's request that the Commission condition any authorization to commence service on Jordan Cove's future Title V Operating Permit.³¹¹ As discussed in the Final EIS, under the CAA, an application to the State of Oregon for this permit is due one year after the source commences operation.³¹²

C. The Projects' Purposes and Reasonable Alternatives

1. The EIS's Purpose and Need Statement

99. NRDC argues that the Commission violated NEPA because it deferred to Jordan Cove's and Pacific Connector's definitions for the projects' purposes and needs in the Final EIS.³¹³ NRDC contends that the Commission must take "a hard look at the factors relevant" to the projects' purpose and need and cannot automatically adopt Jordan Cove's and Pacific Connector's definitions such that the projects are a foregone conclusion.³¹⁴ NRDC acknowledges that the NGA's public interest determinations and NEPA's purpose and need statement differ, but contends that the purpose and need statement in the Final EIS should be informed by the underlying statutory review being conducted, which is to balance public benefits against adverse consequences.³¹⁵ NRDC argues that, by adopting

³⁰⁹ See *supra* P 76 & note 244.

³¹⁰ *Myersville*, 783 F.3d at 1320-21 (upholding the Commission's conditional approval of a natural gas facility construction project where the Commission conditioned its approval on the applicant securing a required federal Clean Air Act air quality permit from the state).

³¹¹ The State of Oregon requires Title V facilities to obtain a Standard Air Containment Discharge Permit prior to commencing construction; in addition, any facility that triggers Prevention of Significant Deterioration permitting, such as the Jordan Cove LNG Terminal and the Pacific Connector Pipeline, must also obtain a Title V Operating Permit. See Final EIS at 4-689.

³¹² *Id.* at 4-689.

³¹³ NRDC Rehearing Request at 46.

³¹⁴ *Id.* at 46-47 (citing *Nat'l Parks Conservation Ass'n v. Bureau of Land Management*, 606 F.3d 1058, 1071 (9th Cir. 2010)).

³¹⁵ *Id.* at 47.

private interests, the Commission's purpose and need statement was so narrow to preclude consideration of a reasonable range of alternatives.³¹⁶

100. An agency's statement of purpose and need in an EIS is evaluated under a reasonableness standard.³¹⁷ Under this standard, agencies are afforded considerable discretion to define the purpose and need statement for a project,³¹⁸ but that statement may not be so narrow to preclude otherwise reasonable alternatives such that "the EIS would become a foreordained formality."³¹⁹ The nature of the proposed federal action must also be informed both by "the project sponsor's goals," as well as "the goals that Congress has set for the agency."³²⁰ Accordingly, under the NGA and NEPA, the Commission's purpose in assessing a project proposed under section 3 or 7 of the NGA is "whether to adopt an applicant's proposal and, if so, to what degree," not to engage in energy resource or natural gas transportation planning.³²¹

101. As discussed in the Authorization Order, the Commission appropriately relied on the general objectives of the projects' applicants.³²² The Final EIS states that the Jordan Cove LNG Terminal will export natural gas supplies from existing natural gas transmission systems to overseas markets, particularly Asia, and the Pacific Connector Pipeline will connect the existing Gas Transmission Northwest, LLC and Ruby Pipeline LLC systems with the proposed terminal.³²³ Such a statement, which explains where the

³¹⁶ *Id.* at 47, 55.

³¹⁷ See, e.g., *Friends of Se.'s Future v. Morrison*, 153 F.3d 1059, 1067 (9th Cir. 1998) (stating that while agencies are afforded "considerable discretion to define the purpose and need of a project," agencies' definitions will be evaluated under the rule of reason); see also *City of Alexandria v. Slater*, 198 F.3d 862, 867 (D.C. Cir. 1999).

³¹⁸ See *City of Angoon v. Hodel*, 803 F.2d 1016 (9th Cir. 1986).

³¹⁹ *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991)).

³²⁰ *Sierra Club v. U.S. Forest Serv.*, 897 F.3d at 598 (quoting *All. for Legal Action v. FAA*, 69 F. App'x 617, 622 (4th Cir. 2003)).

³²¹ See *Theodore Roosevelt Conservation P'ship v. Salazar*, 661 F.3d 66, 73 (D.C. Cir. 2011); see also 15 U.S.C. §§ 717b, 717f (2018); Authorization Order, 170 FERC ¶ 61,202 at P 186 (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d at 191).

³²² Authorization Order, 170 FERC ¶ 61,202 at P 186.

³²³ Final EIS at 1-6.

gas originates and where it is delivered, is permissible as it allows the agency to consider a sufficiently wide range of alternatives to be considered.³²⁴

102. NRDC argues that the Commission only gave serious consideration to the applicants' proposals because it improperly adopted the applicants' purposes in contravention of its duties to consider the public interest under the NGA.³²⁵ NRDC cites *National Parks and Conservation Association v. Bureau of Land Management*³²⁶ for support but in that case the BLM drafted its purpose and need statement for a private land exchange in such narrow terms that it foreordained approval of the land exchange.³²⁷ In contrast, our approval of the projects, as proposed by Jordan Cove and Pacific Connector, was not preordained. The Commission considered the no-action alternative, system alternatives, LNG terminal site alternatives, and pipeline route alternatives and variations, and balanced numerous environmental factors in the Final EIS. As discussed throughout this order and the Authorization Order, the Commission used this analysis in the Final EIS to conditionally approve environmentally acceptable actions, and even adopt a route variation, consistent with its public interest criteria under sections 3 and 7 of the NGA.

2. Alternatives

a. No-Action Alternative

103. NRDC and Sierra Club argue that the Final EIS fails to offer a genuine "no action" alternative because the Final EIS states that under the no-action alternative, exports of LNG from one or more other LNG export facilities may occur.³²⁸ Under the no-action alternative the Commission would deny the requested applications under sections 3 and 7 of the NGA. The Authorization Order explained that under the no-action alternative, the proposed actions would not occur and the environment would not be affected.³²⁹ Contrary to NRDC's claims, the Final EIS also details baseline environmental resources

³²⁴ See *Sierra Club v. U.S. Forest Serv.*, 897 F.3d at 598-99 (upholding the Commission's statement of purpose and need for a natural gas pipeline to run through national forest).

³²⁵ NRDC Rehearing Request at 55.

³²⁶ 606 F.3d 1058, 1072.

³²⁷ *Id.* at 1072.

³²⁸ NRDC Rehearing Request at 48-51; Sierra Club Rehearing Request at 39.

³²⁹ Authorization Order, 170 FERC ¶ 61,202 at P 187 (citing Final EIS at ES-5, 3-4).

before describing the environmental impacts of various alternatives.³³⁰ “[M]erely because a ‘no action’ proposal is given a brief discussion does not suggest that it has been insufficiently addressed.”³³¹ The Final EIS ultimately did not recommend the no action alternative because that alternative would not meet the projects’ purposes and needs.³³² Moreover, no other existing LNG terminal in the region could export LNG, a similar terminal facility may be built to meet the demand for export. This could lead to impacts at other locations and would not result in significant environmental benefits.³³³

b. System and Site Alternatives

104. Petitioners next allege that the Commission failed to take a hard look at alternatives. When an agency is tasked to decide whether to adopt a private applicant’s proposal, and if so, to what degree, a reasonable range of alternatives to the proposal includes rejecting the proposal, adopting the proposal, or adopting the proposal with some modification.³³⁴ Reasonable alternatives are defined as those alternatives “that are technically and economically practical or feasible and meet the purpose and need of the proposed action.”³³⁵ The Commission enjoys broad discretion in evaluating alternatives and utilizing its expertise to balance competing interests.³³⁶ Indeed, “[e]ven if an agency has conceded that an alternative is environmentally superior, it nevertheless may be entitled under the circumstances not to choose that alternative.”³³⁷ As discussed herein,

³³⁰ *Id.* (citing Final EIS at 4-1 to 4-852).

³³¹ *Headwaters, Inc. v. Bureau of Land Mgmt.*, 914 F.2d 1174, 1181 (9th Cir.1990). *See Or. Natural Res. Council v. Lyng*, 882 F.2d 1417, 1423 n.5 (1989) (“The fact that the description of the no-action alternative is shorter than those of the other proposals does not necessarily indicate that the no-action alternative was not considered seriously. It may only reveal that the forest service believed that the concept of a no-action plan was self-evident while the specific timber sale plans needed explanation.”).

³³² Final EIS at 3-5.

³³³ *Id.*

³³⁴ *See Theodore Roosevelt Conservation P’ship*, 661 F.3d at 72-74.

³³⁵ 43 C.F.R. § 46.420(b) (2019).

³³⁶ *Minisink*, 762 F.3d at 111. *See also Myersville*, 783 F.3d at 1324 (deferring to agency’s rejection of a pipeline loop alternative that would eliminate the emissions associated with the proposed compressor station but would disturb more land).

³³⁷ *Myersville*, 783 F.3d at 1324.

the Final EIS takes a hard look at alternatives, including the no action alternative, system alternatives, LNG terminal site alternatives, and pipeline route alternatives and variations.

i. The Existing LNG Storage Alternatives

105. NRDC argues that the Commissions improperly dismissed as an alternative the use of any of the four LNG storage facilities in Oregon and Washington that are connected to natural gas systems, because these facilities were not designed to export LNG and therefore would require significant modifications to meet the projects' purpose.³³⁸ NRDC contends that the Commission failed to assess whether modifications at these facilities would be technically or economically feasible.³³⁹

106. As discussed in the Final EIS, Commission staff considered whether the four peak shaving LNG storage plants could meet the terminal's objectives, but determined that modifying these plants was not technically or economically practical or feasible.³⁴⁰ Because the plants are not designed to export LNG, they would require significant modifications; the facilities needed to export LNG do not exist and the storage tanks are too small to meet the project's goals. On review, NRDC argues that the Commission should have provided a more detailed discussion, but CEQ regulations only require a brief discussion of why an alternative was eliminated³⁴¹ and NRDC fails to establish that this determination was erroneous.

ii. The Humboldt Bay Site Alternative

107. NRDC next argues that the Commission improperly dismissed the Humboldt Bay site alternative because its environmental impacts would be similar to the terminal and those of any connecting pipeline would be similar to the proposed route.³⁴² NRDC claims the Final EIS does not provide any information to determine whether the Humboldt Bay site would provide a significant environmental advantage or disadvantage, as there could be numerous routes and locations that may appear similar on their surface

³³⁸ NRDC Rehearing Request at 52.

³³⁹ *Id.* at 53.

³⁴⁰ Final EIS at 3-5.

³⁴¹ 40 C.F.R. § 1502.14(a) (2019).

³⁴² NRDC Rehearing Request at 52.

but may offer significant environmental advantages or disadvantages upon deeper evaluation.³⁴³

108. The Final EIS examines whether the nearest deepwater port, Humboldt Bay in California, was a feasible alternative site for the proposed action.³⁴⁴ The Final EIS summarizes Commission staff's consideration of potential site locations, parcel availability, land use, and general environmental impacts. Commission staff identified the Samoa Peninsula within Humboldt Bay as generally available for coastal-dependent industry development.³⁴⁵ The Samoa Peninsula includes open land, BLM-managed recreation land, public beaches, former and current industrial land, numerous residences, an elementary school, coastal shrub and wooded vegetation, and coastal dunes. Based on the characteristics of the existing navigational channels within Humboldt Bay as described in the Final EIS, dredging impacts are expected to be similar or greater to those at the proposed site.³⁴⁶ Given the presence of these resources on or adjacent to the peninsula, and the presence of several communities located across the shipping channel, a 200-acre LNG terminal located in Humboldt Bay would likely result in impacts similar to or greater than the proposed project.

109. With regard to an associated pipeline, Commission staff estimated that the pipeline distance between Malin, Oregon and Humboldt Bay would be approximately 200 miles.³⁴⁷ Similar to the proposed route, this route would use existing roads and utility rights-of-way, would maximize use of open lands and ridgelines, and would reduce the crossing of extremely mountainous terrain. Based on staff's desktop analysis, assuming a nominal 95-foot-wide construction right-of-way, an approximate 200-mile-long pipeline route would affect about 2,300 acres of land, 286 fewer acres than the proposed route.³⁴⁸

³⁴³ *Id.* at 54.

³⁴⁴ Final EIS at 3-10.

³⁴⁵ *Id.*

³⁴⁶ *Id.*

³⁴⁷ *Id.* This estimate was based on a route originating near Malin, Oregon proceeding due west along the Oregon-California border, turning southwest north of Dorris, California and generally following highway 97, before turning due west near Mt. Hebron, California to Yreka, California, and then proceeding in a southwest direction to just south of Weitchpec, California, continuing southwesterly to a location about 10 miles east of Eureka, California, and finally proceeding west to Humboldt Bay. *Id.*

³⁴⁸ The proposed pipeline construction right-of-way is approximately 229 miles long, not including temporary extra work areas, contractor and pipe storage yards, access

A pipeline from Malin to Humboldt Bay would cross at least 110 miles of forested and mountainous terrain, resulting in impacts of about 1,265 acres, 394.3 acres fewer than the proposed route.³⁴⁹ This alternative pipeline route would also cross a similar number of major waterbodies.

110. Based on these estimates, Commission staff expected the terminal site at Humboldt Bay would not offer any environmental advantages and the associated pipeline would offer only minor environmental advantages compared to the proposed terminal location and pipeline route. Therefore, the alternative would not offer a significant environmental advantage over the proposed action. As stated in the Final EIS, staff does not recommend adopting an alternative that is environmentally comparable or results in minor advantages but merely shifts the projects impacts from one set of landowners to another.³⁵⁰

111. In addition, we also find based on a review of the record that this alternative is not feasible. According to Jordan Cove, the bay lacks an available parcel or combination of parcels equaling the approximately 200 acres needed for an LNG terminal site.³⁵¹ Accordingly, we affirm Commission staff's determination concerning the Humboldt Bay Site alternative in the Final EIS.

iii. Alternative Slip and Berth Size

112. Sierra Club contends that the Commission should have considered alternatives that would have reduced the size of the proposed slip and berth to the minimum necessary to accommodate the largest carriers that the terminal is authorized to use.³⁵² Sierra Club notes that Jordan Cove will dredge the terminal slip to accommodate LNG carriers as large as 217,000 m³ in capacity, but the largest carrier visiting the terminal is expected to be 148,000 m³ in capacity.³⁵³ Sierra Club claims that it appears that 148,000 m³ carriers are roughly 15 percent shorter in length and have lower drafts than 217,000 m³

roads, and aboveground facilities, and would impact approximately 2,586 acres of land. *Id.* at 4-437.

³⁴⁹ The approved route, including the incorporation of the Blue Ridge Variation, would impact 1,659.3 acres of mountainous and forested terrain. *Id.* at 3-28, 4-437.

³⁵⁰ *Id.* at 3-3.

³⁵¹ Jordan Cove DEIS Comments at Attachment A, 4 (July 5, 2019).

³⁵² Sierra Club Rehearing Request at 45-47.

³⁵³ *Id.* at 46.

carriers.³⁵⁴ Sierra Club acknowledges that the Final EIS indicates that the Coast Guard confirmed that the proposed slip width is needed for safety purposes, but the Commission failed to fully explain this determination and otherwise ignored slip length.³⁵⁵

113. The lengths, widths, and drafts of the existing LNG carrier fleet vary depending on design and manufacturer. These variations in ship size occur across all carrier types, even among carriers with similar LNG storage capacities. The Coast Guard indicated that the waterway is suitable to receive LNG carriers with up to 148,000 m³ nominal capacities.³⁵⁶ Based on publicly and privately available data on LNG carriers currently operating in the global market, the difference in length between the carriers of this nominal capacity and vessels with capacities of 217,000 m³ is between approximately 60 and 85 feet (6-8%), and the respective difference in drafts is about 2.5 feet. Setting aside other site-specific factors including channel and tidal characteristics in which affect slip design, reducing the slip length by up to 85 feet and the depth by 2.5 feet would reduce the slip size by less than two acres³⁵⁷ and the volume of excavated soil by about 6,300 yards,³⁵⁸ neither of which would result in a significant environmental advantage when compared to the proposed action.³⁵⁹ Therefore, based on this minor difference in vessel lengths and drafts, and resulting environmental impacts, staff determined, and we agree, that an alternative slip design assessment would not offer a significant environmental advantage over the proposed action.

iv. **Eliminating the Emergency Lay Berth Alternative**

114. Sierra Club next argues that the Commission failed to explore an alternative that omitted the proposed emergency vessel lay berth from the slip, which provides a place to

³⁵⁴ *Id.*

³⁵⁵ *Id.* (citing app. R, pt. 3, SA2-389).

³⁵⁶ Final EIS at 4-91.

³⁵⁷ Commission staff calculated this figure using the following formula: reduced slip length (85 feet) x proposed slip width (800 feet) = 68,000 feet² / 43,560 feet² per acre = 1.6 acres.

³⁵⁸ Commission staff calculated this figure using the following formula: reduced slip area (68,000 feet²) x reduced depth of excavation (2.5 feet) = 170,000 cubic feet / 27 cubic feet per yard = 6,296 yards.

³⁵⁹ The proposed slip size is 52 acres. *See* Resource Report 1 at 33. The slip will also result in 3.8 million cubic yards of dredged material. EIS at 2-17.

store a disabled carrier.³⁶⁰ Sierra Club questions whether this feature is needed, and states that no other LNG terminal in the United States includes a lay berth.³⁶¹

115. Jordan Cove indicated that, in response to U.S. Coast Guard concerns, it included the emergency lay berth to mitigate the scenario where a temporarily non-operational LNG carrier needed to be berthed during a port call.³⁶² The Coast Guard assists the Commission in evaluating whether an applicant's proposed waterway would be suitable for LNG marine vessel traffic;³⁶³ accordingly, the Commission defers to the Coast Guard as the recognized safety experts on the need for the lay berth to ensure safe operations.

116. Moreover, we note that eliminating the lay berth would not reduce the overall slip size or result in a significant environmental advantage. The lay berth and operational berth are both located on either side of a U-shaped slip. Although the lay berth is located within the slip, it does not actually enlarge the slip. Thus, eliminating the lay berth would not reduce the overall slip size, which in turn would not significantly reduce the environmental impact of the project. An alternative that does not reduce an environmental impact would not result in a significant environmental advantage when compared to the proposed project component. Finally, any reduction in the slip width to eliminate a lay berth would negatively impact safely docking LNG vessels.³⁶⁴

v. **The Shoreline Berth Alternative**

117. Sierra Club alleges that the Commission improperly eliminated the "shoreline berth" or shoreside berth, because it would require more acres of dredging, and, therefore, not offer a significant environmental advantage.³⁶⁵ Sierra Club argues that the Commission ignored the volume of dredged material, the needed depth of dredging, and the changes to the river floor.³⁶⁶ Moreover, Sierra Club asserts that eliminating the alternative based on dredging alone ignores the extensive excavation, spoil disposal, and

³⁶⁰ Sierra Club Rehearing Request at 48.

³⁶¹ *Id.*

³⁶² Jordan Cove Resource Report 1 at 11.

³⁶³ Final EIS at 4-739.

³⁶⁴ *Id.* at Appendix R, pt. 3, SA2-389.

³⁶⁵ Sierra Club Rehearing Request at 48-49.

³⁶⁶ *Id.* at 49.

hydrologic and biological impacts associated with the slip.³⁶⁷ Sierra Club also argues that the Commission should have considered the shoreline berth sized for 148,000 m³ carriers.³⁶⁸

118. The Commission fully considered the shoreline berth and appropriately eliminated the alternative on multiple grounds.³⁶⁹ The EIS determined that a shoreside berth alternative would not result in a significant environmental advantage because it would require essentially the same amount of in-water dredging than the proposed configuration and may require additional dredging for the second emergency lay berth.³⁷⁰ Smaller berths, sized for 148,000 m³ carriers, may reduce the amount of dredging slightly,³⁷¹ but this decrease would not result in a significant environmental advantage. Contrary to Sierra Club's claim that the Final EIS only considers dredging when eliminating the alternative, the Final EIS also eliminates the alternative due to safety and reliability concerns.³⁷² The shoreline berth alternative would place docked LNG carriers in the direct path of other vessel traffic navigating north up the river along an outside bend in the channel and put the carrier in danger of collision from other vessels.³⁷³ As required by NEPA, the Final EIS examines this alternative but eliminated it from further consideration due to these safety and environmental impacts. Accordingly, we find that the Final EIS appropriately eliminates this alternative.

vi. The Waste Heat Recovery Alternative

119. Sierra Club argues that the Commission should have considered alternatives that would require Jordan Cove to use waste heat to generate all electricity needed for the terminal.³⁷⁴ Operating the LNG terminal would require approximately 39.2 megawatts

³⁶⁷ *Id.*

³⁶⁸ *Id.*

³⁶⁹ Final EIS at 3-16 to 3-17.

³⁷⁰ *Id.* at 3-16.

³⁷¹ *See supra* at P 113.

³⁷² Final EIS at 3-16 to 3-17.

³⁷³ *Id.*

³⁷⁴ Sierra Club Rehearing Request at 50.

(MW) (holding mode) and 49.5 MW (loading mode) of electricity.³⁷⁵ As Sierra Club acknowledges, Jordan Cove will already use waste heat to generate a portion of electricity at the terminal.³⁷⁶ Jordan Cove will operate three, 30-MW steam turbine generators to provide 24.4 MW of power and an auxiliary boiler when two or more heat steam recovery generators are offline for maintenance.³⁷⁷ Steam for use by the steam turbine generators will be generated by heat recovery steam generators, using exhaust from the LNG refrigerant compression gas turbine drivers.³⁷⁸ Jordan Cove will supply the remaining 15 to 26 MW of electricity using a connection with the local power grid.³⁷⁹ Sierra Club asks that the Commission consider using gas turbine exhaust energy as a fuel source alternative, but, as discussed, Jordan Cove already plans to use this technology to generate electricity.³⁸⁰ Commission staff determined, and we agree, that supplying all facility power through waste heat is not feasible.

c. Pipeline Route Alternatives

120. Ms. McCaffree argues that the Commission failed to consider reasonable route alternatives that she previously raised. In her request, Ms. McCaffree fails to describe these routes and instead cites accession numbers to exhibits to previous comments.³⁸¹ As discussed, the Commission has rejected attempts to incorporate by reference arguments from a prior pleading because such incorporation fails to inform the Commission as to which arguments from the referenced pleading are relevant and how they are relevant.³⁸² Accordingly, we dismiss her request.³⁸³

³⁷⁵ Final EIS at 2-8.

³⁷⁶ Sierra Club Rehearing Request at 50.

³⁷⁷ Jordan Cove Resource Report 1 at 32; May 2, 2019 Supplemental Filing at 6; Jordan Cove Application at 7.

³⁷⁸ Jordan Cove Resource Report 1 at 27-28, 32.

³⁷⁹ Final EIS at 2-8.

³⁸⁰ Sierra Club Rehearing Request at 50.

³⁸¹ McCaffree Rehearing Request at 34.

³⁸² *See supra* PP 15, 17.

³⁸³ Moreover, Ms. McCaffree's cited submissions during the NEPA process do not describe or clearly show her preferred alternatives.

D. Connected Actions

121. Ms. McCaffree states that the Commission failed to analyze the Port of Coos Bay's proposed Coos Bay Section 408/204(f) Channel Modification as a connected action together with Jordan Cove's proposals in a single EIS.³⁸⁴ As noted in the Final EIS, the Port of Coos Bay is in the engineering and design phase for several proposed activities that make up the proposed Coos Bay Section 408/204(f) Channel Modification to improve navigation efficiency, reduce shipping transportation costs, and facilitate the shipping industry's transition to larger, more efficient vessels.³⁸⁵ The Port of Coos Bay would dredge 15.5 million cubic yards of material from several miles of the channel over the course of three years.³⁸⁶ The Port of Coos Bay's planned Channel Modification must be authorized by the Corps, which is preparing a separate EIS.³⁸⁷

122. Pursuant to CEQ regulations, "connected actions" include actions that: (a) automatically trigger other actions, which may require an EIS; (b) cannot or will not proceed without previous or simultaneous actions; or (c) are interdependent parts of a larger action and depend on the larger action for their justification.³⁸⁸ Connected actions "are closely related and therefore should be discussed in the same impact statement."³⁸⁹ In evaluating whether multiple actions are, in fact, connected actions, courts have employed a "substantial independent utility" test, which the Commission finds useful for determining whether the three criteria for a connected action are met. The test is articulated variously as "whether one project will serve a significant purpose even if a

³⁸⁴ McCaffree Rehearing Request at 29-31.

³⁸⁵ Final EIS at 4-832, tbl.4.14-2 n.b/.

³⁸⁶ *Id.* at 4-836.

³⁸⁷ *Id.*

³⁸⁸ 40 C.F.R. § 1508.25(a)(1) (2019).

³⁸⁹ *Id.*

second related project is not built”³⁹⁰ or whether “each of two projects would have taken place with or without the other.”³⁹¹

123. Ms. McCaffree asserts that the Coos Bay Section 408/204(f) Channel Modification is largely dependent upon funding from Jordan Cove and that Jordan Cove may substantially increase its exports because the Channel Modification will enable more vessel traffic.³⁹² Based on these assertions, Ms. McCaffree concludes that without the Jordan Cove LNG Terminal, the Coos Bay Section 408/204(f) Channel Modification has no independent utility and would not exist, and that without the Channel Modification, the Jordan Cove LNG Terminal might not support a final investment decision and would not likely be built.³⁹³

124. Ms. McCaffree’s allegations of mutual benefit do not prove that the Jordan Cove LNG Terminal and the Coos Bay Section 408/204(f) Channel Modification are connected actions under NEPA. On May 10, 2018, the Coast Guard issued a revised Letter of Recommendation indicating that the Coos Bay Federal Navigation Channel as it is currently maintained would “be considered suitable for accommodating the type and frequency of LNG marine traffic associated with [the Jordan Cove LNG Terminal].”³⁹⁴ On November 7, 2018, the Coast Guard confirmed that vessel transit simulation studies conducted by Jordan Cove demonstrated that Jordan Cove could use any class of LNG carrier with physical dimensions equal to or smaller than those observed during the simulated transits.³⁹⁵ The Port of Coos Bay has an independent interest in the benefits

³⁹⁰ *Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 69 (D.C. Cir. 1987). See also *O’Reilly v. U.S. Army Corps of Eng’rs*, 477 F.3d 225, 237 (5th Cir. 2007) (defining independent utility as whether one project “can stand alone without requiring construction of the other [projects] either in terms of the facilities required or of profitability”).

³⁹¹ *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d 1291, 1305 (9th Cir. 2003) (internal citation omitted).

³⁹² McCaffree Rehearing Request at 30. Ms. McCaffree contends that the entrance to the Charleston Harbor along the vessel route is 0.3 feet too shallow to allow an LNG tanker with a loaded draft of 40 feet to safely transit unless the Channel Project widens and deepens the channel to accommodate a safety-related 10% under-keel clearance. *Id.* at 25-26.

³⁹³ *Id.* at 30-31.

³⁹⁴ Final EIS at 1-15; 4-749 to 4-750.

³⁹⁵ *Id.* at 1-15, 4-749 to 4-750.

from the Coos Bay Section 408/204(f) Channel Modification, such as facilitating the shipping industry's transition to larger, more efficient vessels,³⁹⁶ because the number of calls at the port by deep-draft vessels has declined from more than 300 per year in the late 1980s to about 200 in the late 2000s to just over 40 in 2015.³⁹⁷ Based on these circumstances, we conclude that the Jordan Cove LNG Terminal and the Coos Bay Section 408/204(f) Channel Modification will each serve a significant purpose even if the other is not built and that each of two projects would have taken place with or without the other. Because these projects have substantial independent utility, they are not connected actions under NEPA.

125. We note that the Final EIS does consider potential impacts from the Coos Bay Section 408/204(f) Channel Modification in the Final EIS' discussion of cumulative impacts.³⁹⁸ As discussed in the Final EIS, these impacts are temporary, and none amount to significant environmental impacts.³⁹⁹ Ms. McCaffree takes no issue with this analysis.

E. Environmental Justice

1. Identifying Environmental Justice Populations

126. Executive Order 12898 requires that specified federal agencies make achieving environmental justice part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human or environmental health effects of their programs, policies, and activities on minorities and low income populations (environmental justice populations).⁴⁰⁰ The Commission is not one of the specified

³⁹⁶ *Id.* at 4-832, tbl.4.14-2 n.b/.

³⁹⁷ *Id.* at 4-653.

³⁹⁸ *Id.* at 4-828, 4-830 tbl.4.14-2, 4-834 to 4-837, 4-840 to 4-841, 4-843, 4-844, 4-847, 4-851.

³⁹⁹ *Id.*

⁴⁰⁰ Exec. Order No. 12898 §§ 1-101, 6-604, 59 Fed. Reg. 7629, at 7629, 7632 (Feb. 11, 1994). Identification of a disproportionately high and adverse impact on a minority or low-income population “does not preclude a proposed agency action from going forward, nor does it necessarily compel a conclusion that a proposed action is environmentally unsatisfactory.” Council on Environmental Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act*, at 10 (1997) (CEQ 1997 Environmental Justice Guidance), <https://www.epa.gov/environmentaljustice/ceq-environmental-justice-guidance-under-national-environmental-policy-act>; Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews*, at 38 (2016) (quoting same),

agencies, and the provisions of Executive Order 12898 are not binding on this Commission. Nonetheless, in accordance with our usual practice, the Final EIS addresses environmental justice issues.⁴⁰¹ An agency's choice among reasonable analytical methodologies for an environmental justice analysis is entitled to deference.⁴⁰²

127. Consistent with guidance from the Council on Environmental Quality (CEQ) and the EPA, Commission staff analyzed the presence of minority and/or low-income populations; and whether impacts on human health or the environment would be disproportionately high and adverse for minority and low-income populations and appreciably exceed impacts on the general population or other comparison group.⁴⁰³ NRDC asserts that the Final EIS undertakes a flawed methodology at both steps.⁴⁰⁴

128. To identify potential environmental justice populations that could be affected by geographic proximity to the project, Commission staff selected an area of analysis for the Jordan Cove LNG Terminal extending out a 3-mile radius from the center of the terminal site⁴⁰⁵ and an area of analysis for the pipeline consisting of the 19 census tracts that would be crossed by the pipeline route and another census tract within 1 mile of the route.⁴⁰⁶ Commission staff used information from EPA's Environmental Justice Mapping and Screening Tool (EJSCREEN) about low income and minority populations to inform its assessment of the potential presence of environmental justice communities in the chosen areas of analysis.⁴⁰⁷ The Final EIS acknowledges that larger and more

https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

⁴⁰¹ See Final EIS at 4-622 to 4-629 & 4-646 to 4-650.

⁴⁰² *Sierra Club v. FERC*, 867 F.3d at 1368 (quoting *Cmtys. Against Runway Expansion, Inc. v. FAA*, 355 F.3d 678, 689 (D.C. Cir. 2004)).

⁴⁰³ Final EIS at 4-623 (citing CEQ 1997 Environmental Justice Guidance and EPA, *Final Guidance For Incorporating Environmental Justice Concerns In EPA's NEPA Compliance Analysis*, at §§ 3.2.1-3.2.2. (1998), https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_epa0498.pdf (EPA 1998 Environmental Justice Guidance)).

⁴⁰⁴ NRDC Rehearing Request at 88-92.

⁴⁰⁵ Final EIS at 4-623.

⁴⁰⁶ *Id.* at 4-646.

⁴⁰⁷ *Id.* at 4-623, 4-647 to 4-649.

populated geographic areas can have the effect of masking or diluting the presence of concentrations of environmental justice populations.⁴⁰⁸ Commission staff addressed this problem by separately reviewing data for the 10 identified census tracts fully or partially located within 3 miles of the areas that would be disturbed during construction of the LNG terminal.⁴⁰⁹ The Final EIS finds that low-income and minority environmental populations are present within 3 miles of the Jordan Cove LNG Terminal and along portions of the Pacific Connector Pipeline route, including the census tract where the Klamath Compressor Station will be located.⁴¹⁰

129. NRDC claims that the Commission failed to recognize the limits of the EJSCREEN tool.⁴¹¹ NRDC points to the EPA’s disclaimer that the EJSCREEN tool is “a pre-decision screening tool, and was not designed to be the basis for agency decision making or determinations regarding the existence or absence of EJ concerns.”⁴¹²

130. As described above, Commission staff appropriately used the EJSCREEN tool as a pre-decision screening tool to assess the potential presence of environmental justice populations within Commission staff’s chosen areas of analysis. The Final EIS and the Commission did not use the EJSCREEN tool as the sole basis for agency decision making or determinations regarding the existence or absence of environmental justice concerns. NRDC cites to an earlier comment addressing the EJSCREEN tool,⁴¹³ but such incorporation by reference is improper and is dismissed.⁴¹⁴

131. NRDC criticizes the Final EIS for providing other demographic indicators from EJSCREEN besides minority populations and income—i.e., linguistic isolation, education, and age—as “context” without explaining whether this information plays any role in the analysis.⁴¹⁵

⁴⁰⁸ *Id.* at 4-623.

⁴⁰⁹ *Id.*

⁴¹⁰ *Id.* at 4-626 to 4-627, 4-647 to 4-648.

⁴¹¹ NRDC Rehearing Request at 99.

⁴¹² *Id.* (quoting EPA, *EJSCREEN: Technical Documentation 9* (Aug. 2017)).

⁴¹³ *Id.* (citing NRDC July 5, 2019 Comments on the Draft EIS, attachment 1 (report of Dr. Ryan Emanuel)).

⁴¹⁴ *See supra* P 15.

⁴¹⁵ NRDC Rehearing Request at 93.

132. We disagree with NRDC's assertion that this information creates confusion and ambiguity.⁴¹⁶ The additional data in EJSCREEN are considered potential indicators of vulnerable populations.⁴¹⁷ The Final EIS appropriately provides this information to give the Commission and the public a more complete understanding of the populations potentially affected by the project, even if the additional demographic indicators do not directly inform the required environmental justice analysis under Executive Order 12898.

133. NRDC contends that the approach in the Final EIS to combine all minority populations together treats people of color as interchangeable, conflates distinct environmental justice concerns, and produces flawed results.⁴¹⁸ NRDC states that the approach fails to account for discrete minority populations that are too small to constitute a minority environmental justice population but are nonetheless large relative to the overall population of that minority group in the statewide reference community in Oregon.⁴¹⁹ NRDC points to the Native American population as an example, and NRDC asserts that the Final EIS' methodology leaves no way to detect other minority groups that would be similarly overlooked by the Final EIS' methodology.⁴²⁰

134. We disagree that the approach used in the Final EIS to identify minority environmental justice populations was flawed. NRDC cites no authority for its criticism of the combined treatment of all minority populations. As noted in the Final EIS, the implementing guidance documents for Executive Order 12898 support the chosen approach. These guidance documents define a minority environmental justice population to be a population where the minority population comprises more than 50% of the total population or comprises "a meaningfully greater share" than an appropriate reference community.⁴²¹ A minority population exists if there is "more than one minority group

⁴¹⁶ *Id.*

⁴¹⁷ Final EIS at 4-623.

⁴¹⁸ NRDC Rehearing Request at 92.

⁴¹⁹ *Id.*

⁴²⁰ *Id.*

⁴²¹ EIS at 4-622, 4-625; CEQ 1997 Environmental Justice Guidance at 25; EPA 1998 Environmental Justice Guidance at 15; Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 21-25 (2016)). Consistent with recent guidance that the "meaningfully greater" analysis "requires use of a reasonable, subjective threshold (e.g., ten or twenty percent greater than the reference community)," Commission staff applied a threshold of 20% in the Final EIS analysis. Final EIS at 4-625 n.205 (quoting

present and the minority group percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.”⁴²² Thus the approach to aggregate minority populations increases the likelihood that an agency will determine a given population to be a minority environmental justice population and will then undertake additional review for disproportionate impacts.⁴²³ Although Native Americans comprise a small share of the local population, the Final EIS treats Tribal populations as an environmental justice population with the potential to be disproportionately affected by the construction and operation of the LNG terminal and pipeline due to scoping comments, Tribal involvement during the review process, and their history and culture.⁴²⁴ This extension of the environmental justice analysis does not indicate that the general methodology was flawed and instead shows that staff considered factors other than EJSCREEN when determining environmental justice populations. NRDC does not identify any other minority group that may have been improperly overlooked by the Final EIS’ methodology, and we are aware of none.

135. NRDC states that although the Final EIS acknowledges that unique issues affect the Native American population, this does not inform the Final EIS’ analysis of disproportionate impacts, which extends only to a discussion of low-income environmental justice populations.⁴²⁵ NRDC states that the Final EIS did not and could not disclose information necessary for a reader to understand and to provide informed comment about the Jordan Cove LNG Terminal’s impact on Native Americans and cultural resources because the Commission’s consultations with Native American communities and with the Oregon SHPO remain pending.⁴²⁶

136. The discussion of Native American populations in the environmental justice section of the Final EIS appropriately acknowledges the potential for these populations to be disproportionately affected but concluded that this potential would be similar to that

Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 25 (2016)).

⁴²² Final EIS at 4-622 (quoting CEQ 1997 Environmental Justice Guidance at 26).

⁴²³ Although the minority population reported in the FEIS is an aggregate, the EJSCREEN-census reports allowed Commission staff to review individual minority populations and we determined that “sub-groups” were not distinctive requiring further designation, with the exception of Native Americans.

⁴²⁴ *Id.* at 4-626, 4-649.

⁴²⁵ NRDC Rehearing Request at 93.

⁴²⁶ *Id.*

described for low-income populations.⁴²⁷ For Native American populations, unlike other environmental justice populations, Commission staff appropriately consulted with Native American tribes under section 106 of the National Historic Preservation Act (NHPA).⁴²⁸ For this reason, the Final EIS in the environmental justice section directs the reader to the other portions of the Final EIS that discuss consultations with Indian tribes, the potential project-related impacts on cultural and other resources that may be important to tribes, and the Commission staff's recommended conditions to mitigate those impacts.⁴²⁹ NRDC cites no requirement that the Final EIS discuss all of these matters in one location, and there is no such requirement.

2. Identifying Disproportionately High and Adverse Impacts

137. NRDC takes issue with the conclusions in the Final EIS that even the projects' greatest anticipated impacts (to visual resources, noise, and housing supply) would not result in disproportionately high and adverse impacts to environmental justice populations.⁴³⁰

138. The Final EIS anticipates that the Jordan Cove LNG Terminal's moderate to high visual impacts will affect residents in census tracts 4 and 5.03.⁴³¹ Data for the narrower census block groups⁴³² within these census tracts revealed that although census tract 4 as a whole had not been identified as a potential low-income population, one of the portions of census tract 4 subject to visual impacts would meet the definition of a low-income population.⁴³³ The visual impacts at the relevant location would be moderate rather than

⁴²⁷ Final EIS at 4-629, 4-649.

⁴²⁸ See *infra* PP 150-162 (discussing cultural resources).

⁴²⁹ Final EIS at 4-629, 4-649 to 4-650.

⁴³⁰ NRDC Rehearing Request 90-91 (citing Final EIS at 4-627 to 4-629; 4-469 to 4-650).

⁴³¹ Final EIS at 4-628.

⁴³² Census block groups are statistical divisions of census tracts, generally defined to contain between 600 and 3,000 people. A census block group consists of clusters of census blocks, the smallest geographic area that the Census Bureau uses to tabulate decennial data. Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 22 n.10 (2016); *id.* at 23 n.11.

⁴³³ Final EIS at 4-628 n.209.

high.⁴³⁴ Data for the census block groups revealed the opposite for census tract 5.03: although census tract 5.03 as a whole had been identified as a potential low-income population, the portion of census tract 5.03 subject to visual impacts would not meet the definition of a low income population.⁴³⁵ The Final EIS concludes that visual impacts on low-income populations in all affected residential areas would not be disproportionately high and adverse when compared to other affected residents.⁴³⁶

139. The Final EIS anticipates that the Jordan Cove LNG Terminal's significant construction noise impacts will potentially affect residents in census tracts 4, 5.02, and 5.03.⁴³⁷ Data for the narrower census block groups within these census tracts reveals that the portions of the census tracts near the shorelines, i.e., the portions subject to the greatest construction noise impacts, do not meet the definition of a low-income population.⁴³⁸ The Final EIS concludes that noise impacts on low-income populations in affected residential areas would not be disproportionately high and adverse when compared to other affected residents.⁴³⁹

140. The Final EIS anticipates that the pipeline's construction and operation impacts, such as emissions from construction equipment, increased dust and noise, and increased local traffic, would not significantly affect the environment, would be temporary and localized, and with mitigation in place are not expected to result in high and adverse human health or environmental effects on any nearby communities.⁴⁴⁰ The Final EIS acknowledges the presence of environmental justice populations in the census tracts crossed by the pipeline route and concludes that "the likelihood that these potential environmental justice and vulnerable populations [including tribal populations] will be disproportionately affected relative to other populations in the census tracts crossed by the pipeline is low."⁴⁴¹

⁴³⁴ *Id.* at 4-628.

⁴³⁵ *Id.* at 4-628 n.209.

⁴³⁶ *Id.* at 4-628.

⁴³⁷ *Id.*

⁴³⁸ *Id.* at 4-628 n.210.

⁴³⁹ *Id.* at 4-628.

⁴⁴⁰ *Id.* at 4-649.

⁴⁴¹ *Id.* at 4-649 and 4-650.

141. NRDC asserts that the Final EIS provides no explanation why it uses the broader scale of a census tract to identify environmental justice populations near the LNG terminal and pipeline but pivots to use the narrower scale of census block groups to analyze the LNG terminal's potential disproportionate impact on the identified populations.⁴⁴² NRDC perceives a risk that the Commission's analysis can obscure the project's true effects on marginalized populations.⁴⁴³ Because the Final EIS does not pivot to use census block groups to analyze the Pacific Connector Pipeline's potential disproportionate impacts to environmental justice communities, NRDC criticizes the different methodology as arbitrary and capricious.⁴⁴⁴ NRDC states that census tracts in sparsely populated areas encompass larger land areas which, when incorporated into the environmental justice analysis, may lead to skewed results that mask the demographic and socioeconomic makeup of the populations living in closest proximity to the project, which matters for the potential disproportionate impact.⁴⁴⁵ NRDC states that the Final EIS's failure to tailor its methodology to account for this methodological flaw renders the entire environmental justice analysis erroneous.⁴⁴⁶

142. The Final EIS reasonably tailors its methodology at each step of the environmental justice inquiry for each set of project activities and impacts. An agency's choice among reasonable analytical methodologies for an environmental justice analysis is entitled to deference.⁴⁴⁷ At step one for both projects, the Final EIS uses the broader census tract, consistent with relevant guidance,⁴⁴⁸ to identify potential environmental justice

⁴⁴² NRDC Rehearing Request at 93-94.

⁴⁴³ *Id.* at 94.

⁴⁴⁴ *Id.* at 96-98.

⁴⁴⁵ *Id.* at 96-98.

⁴⁴⁶ *Id.* at 98.

⁴⁴⁷ *Sierra Club v. FERC*, 867 F.3d at 1368 (quoting *Cmtys. Against Runway Expansion, Inc. v. FAA*, 355 F.3d at 689).

⁴⁴⁸ *E.g.*, CEQ 1997 Environmental Justice Guidance at 26 (“the appropriate unit of geographic analysis may be a governing body’s jurisdiction, a neighborhood, a census tract, or other similar unit that is chosen so as to not artificially dilute or inflate the affected minority population.”); EPA 1998 Environmental Justice Guidance at 15 (same); Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 27 (2016) (“Select an appropriate geographic unit of analysis (e.g., block group, census tract) for identifying low-income populations in the affected environment.”).

populations.⁴⁴⁹ At step two for the LNG terminal, the Final EIS rationally narrows the geographic scale using census block groups to more closely match the area of the visual and noise impacts that the Final EIS anticipates to pose high and adverse effects on human health or the environment.⁴⁵⁰ Populations beyond this narrower area cannot possibly experience visual and noise impacts, so the composition of the broader populations is not relevant to the Commission's analysis. NRDC offers no support for its speculation that the Commission's closer analysis at step two for the LNG terminal could have obscured the project's true effects on marginalized populations.

143. The different methodology at step two for the pipeline was not arbitrary and capricious. It was not necessary for the Final EIS to narrow the geographic scale below the census tract because the Final EIS anticipates that the pipeline would pose no high and adverse effects on human health or the environment.⁴⁵¹ The Final EIS explains generally that a pipeline's impacts differ from a discrete facility, for which impacts are generally concentrated in one location, because a pipeline sequentially establishes or expands a narrow corridor often over long distances passing near populations with a variety of social and economic characteristics.⁴⁵² The Final EIS explains specifically that impacts from the Pacific Connector Pipeline will be localized, temporary, and mitigated.⁴⁵³ The Final EIS explains that the pipeline route mostly crosses rural regions with low population densities, avoids towns and cities, and mostly follows the ridges through the mountains. NRDC offers no support for its speculation that the approach in the Final EIS masked the demographic and socioeconomic makeup of any population living in closest proximity to the pipeline and thus masked the potential disproportionate impact. And we find no support for this claim.

144. NRDC contends that the conclusions in the Final EIS that the LNG terminal's visual impacts on low-income populations would be "moderate"⁴⁵⁴ and that both visual impacts and construction noise impacts "would not be disproportionately high and adverse when compared to other affected residents"⁴⁵⁵ are conclusory statements that,

⁴⁴⁹ Final EIS at 4-625 to 4-627; 4-646 to 4-649.

⁴⁵⁰ *Id.* at 4-627 to 4-628.

⁴⁵¹ *Id.* at 6-469.

⁴⁵² *Id.*

⁴⁵³ *Id.*

⁴⁵⁴ *Id.* at 4-628.

⁴⁵⁵ *Id.*

without further analysis, do not satisfy NEPA and the Administrative Procedure Act (APA).⁴⁵⁶ In a similar vein, NRDC asserts that the conclusion in the Final EIS that for the pipeline the likelihood of a disproportionate impact is low does not appear to be based on a qualitative or quantitative analysis of the data.⁴⁵⁷ NRDC states that the Final EIS fails to recognize that equal exposure across differing populations can lead to disproportionate impacts to the environmental justice populations given pre-existing inequities.⁴⁵⁸

145. We disagree that the conclusions in the Final EIS are unsupported or improperly limited. The Final EIS explicitly acknowledges that step two of the review methodology addresses the questions whether a project's impact on human health or the environment would be disproportionately high and adverse for environmental justice communities and would appreciably exceed impacts on the general population or other comparison group.⁴⁵⁹ To the latter question, there is no evidence in the record that the LNG terminal and pipeline would be sited, constructed, or operated in ways that unequally distribute exposure pathways, environmental consequences, and the resulting impacts⁴⁶⁰ upon environmental justice populations and appreciably exceed impacts on the general population or a comparison group. We acknowledge that the apparently equal distribution of exposure pathways and environmental consequences, even if the resulting impacts would not be high to the broader affected population, can result in disproportionately high and adverse impacts to environmental justice populations.⁴⁶¹ But there is no basis to conclude, and NRDC offers none, that the identified low-income

⁴⁵⁶ NRDC Rehearing Request at 94.

⁴⁵⁷ *Id.* at 98.

⁴⁵⁸ *Id.* at 98-99.

⁴⁵⁹ Final EIS at 4-623, 4-646.

⁴⁶⁰ See Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 29 (2016) (parsing terminology, an impact is the adverse or beneficial result of exposure pathways or other environmental consequence of the proposed action).

⁴⁶¹ See, e.g., Federal Interagency Working Group for Environmental Justice and NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* at 39 (2016) (suggesting that agencies recognize that even where a project's impact "appears to be identical to both the affected general population and the affected minority populations and low-income populations," the impact might be amplified by population-specific factors, "e.g., unique exposure pathways, social determinants of health, community cohesion," making the impact disproportionately high and adverse).

environmental justice populations have a special sensitivity to the LNG terminal's significant visual resource impacts and construction noise or have a special sensitivity to the pipeline's localized, temporary, and mitigated impacts, such that a disproportionately high and adverse impact might result. The special sensitivity of the Native American population, as the only identified minority environmental justice population potentially affected by the projects, is addressed in other portions of the Final EIS, as noted in the environmental justice section of the Final EIS.⁴⁶² Accordingly, we deny rehearing and find that the Commission engaged in a hard look at environmental justice to satisfy NEPA and explained the reasoning for its conclusions to satisfy the APA.

F. Noise

146. Jordan Cove and Pacific Connector seek clarification about the deadlines to take steps, if necessary, to control operating noise at the pipeline's Klamath Compressor Station.⁴⁶³ Under Environmental Condition 34 of the Authorization Order, Pacific Connector must file a noise survey shortly after placing the Klamath Compressor Station into service. Pacific Connector may also be required to file a second noise survey for the Klamath Compressor Station shortly after placing all liquefaction trains at the Jordan Cove LNG Terminal into service. The results of either noise survey could trigger further steps to control the operating noise at the compressor station. Environmental Condition 34 states:

Pacific Connector shall file a noise survey with the Secretary no later than 60 days after placing the Klamath Compressor Station in service. If a full load condition noise survey is not possible, Pacific Connector shall provide an interim survey at the maximum possible horsepower load and provide the full load survey no later than 60 days after all liquefaction trains at the LNG Terminal are fully in service. If the noise attributable to the operation of all of the equipment at the Klamath Compressor Station under interim or full horsepower load conditions exceeds an Ldn of 55 dBA at any nearby NSAs, *Pacific Connector shall file a report on what changes are needed and shall install the additional noise controls to meet the level within 1 year of the in-service date.* Pacific Connector shall confirm compliance with the above requirement by filing a second noise survey with the

⁴⁶² Final EIS at 4-629, 4-649 to 4-650 (providing cross-references to sections 4.9 and 4.11 of the EIS).

⁴⁶³ Jordan Cove and Pacific Connector Rehearing Request at 28-31; Authorization Order, 170 FERC ¶ 61,202 at P 257; *id.* app., envtl. condition 34.

Secretary no later than 60 days after it installs the additional noise controls.⁴⁶⁴

147. Jordan Cove and Pacific Connector request that the Commission clarify that the deadline to file a report on what changes are needed and to install additional noise controls “within 1 year of the in-service date” refers to the two separate in-service dates that inform the deadlines for the two noise surveys: (1) the placement of the Klamath Compressor Station in service and (2) the later placement of all liquefaction trains at the Jordan Cove LNG Terminal fully in service.⁴⁶⁵

148. We grant clarification. We agree that the reference to the in-service date is ambiguous, as described above. The Commission intended to require that Pacific Connector complete further steps to control the operating noise at the Klamath Compressor Station, if necessary, within one year of the in-service date that immediately preceded the noise survey showing an exceedance of the Commission’s noise threshold. The Commission modifies Environmental Condition 34 to read:

Pacific Connector shall file a noise survey with the Secretary no later than 60 days after placing the Klamath Compressor Station in service. If a full load condition noise survey is not possible, Pacific Connector shall provide an interim survey at the maximum possible horsepower load and provide the full load survey no later than 60 days after all liquefaction trains at the LNG Terminal are fully in service. If the noise attributable to the operation of all of the equipment at the Klamath Compressor Station under interim or full horsepower load conditions exceeds an Ldn of 55 dBA at any nearby NSAs, Pacific Connector shall file a report on what changes are needed and shall install the additional noise controls to meet the level within 1 year of the in-service date *that immediately preceded the noise survey showing an exceedance*. Pacific Connector shall confirm compliance with the above requirement by filing a second noise survey

⁴⁶⁴ Authorization Order, 170 FERC ¶ 61,202, app., envtl. condition 34 (emphasis added).

⁴⁶⁵ Jordan Cove and Pacific Connector Rehearing Request at 28. Jordan Cove and Pacific Connector note that the pipeline would go into service 18 months before the LNG terminal and would gradually increase flow as the LNG terminal is commissioned. *Id.* at 29.

with the Secretary no later than 60 days after it installs the additional noise controls.

G. Cultural Resources

149. Petitioners contend that the Commission erred in issuing the Authorization Order while a number of issues pertaining to cultural resources remain unresolved.⁴⁶⁶ Specifically, petitioners state that the Commission could not take a “hard look” at the projects’ impacts to cultural resources because “cultural resource surveys are not yet complete for the Jordan Cove LNG Terminal or the Pacific Connector Pipeline.”⁴⁶⁷

150. We disagree that the Final EIS for the projects is based on inadequate information. Although the Commission must consider and study environmental issues before approving a project, it does not require a definitive resolution of all environmental concerns before approving a project. NEPA does not require completion of every study or aspect of an analysis before an agency can issue a Final EIS and the courts have held that an agency does not need perfect information before it takes any action.⁴⁶⁸

151. The Authorization Order acknowledges that the Commission has not yet completed NHPA consultation;⁴⁶⁹ consultation with Indian tribes, the Oregon SHPO, and other applicable agencies is still ongoing.⁴⁷⁰ The Final EIS recommends, and Environmental Condition 30 of the Authorization Order states that the applicants may not begin construction of facilities or use of any staging, storage, temporary work areas, and new or to-be-improved access roads until: (1) the applicants file the remaining cultural resource survey reports, site evaluations and monitoring reports (as necessary), a revised ethnographic study, final Historic Properties Management Plans for both projects, a final

⁴⁶⁶ Confederated Tribes Rehearing Request at 18-22; Cow Creek Band Rehearing Request at 11-15; NRDC Rehearing Request at 93; Sierra Club Rehearing Request at 27-29; McCaffree Rehearing Request at 28.

⁴⁶⁷ Confederated Tribes Rehearing Request at 18; Cow Creek Band Rehearing Request at 8-11.

⁴⁶⁸ *U.S. Dep’t of the Interior v. FERC*, 952 F.2d 538, 546 (D.C. Cir. 1992); *State of Ala. v. Andrus*, 580 F.2d 465, 473 (D.C. Cir. 1978), *vacated in part sub. nom., W. Oil & Gas Ass’n v. Ala.*, 439 U.S. 922 (1978) (“NEPA cannot be ‘read as a requirement that complete information concerning the environmental impact of a project must be obtained before action may be taken.’”) (citation omitted).

⁴⁶⁹ Authorization Order, 170 FERC ¶ 61,202 at P 252; Final EIS at 4-684 to 4-686.

⁴⁷⁰ Authorization Order, 170 FERC ¶ 61,202 at P 252; Final EIS at 5-9.

Unanticipated Discovery Plan, and comments from the SHPO, interested Indian tribes, and applicable federal land-managing agencies; (2) the Advisory Council on Historic Preservation (Advisory Council) is afforded an opportunity to comment on the undertaking; and (3) Commission staff reviews and approves all cultural resources reports, studies, and plans, and notifies the applicants in writing that treatment plans may be implemented and/or construction may proceed.⁴⁷¹

152. The Authorization Order further acknowledges that cultural resource surveys are not yet complete for the Jordan Cove LNG Terminal or the Pacific Connector Pipeline.⁴⁷² However, surveys that the applicants have completed identified cultural sites that the applicants must monitor during construction or otherwise mitigate prior to construction.⁴⁷³ In addition, if the applicants cannot avoid identified cultural sites, the applicants must conduct further studies and testing.⁴⁷⁴

153. The Authorization Order explains that the Final EIS concludes that construction and operation of the projects would have adverse effects on historic properties, but that an agreement document, discussed further below, would be developed with the goal of resolving those impacts.⁴⁷⁵

1. Issuance of Certificate Order Prior to Completing Section 106 Consultation

154. Petitioners contend that issuing the Authorization Order prior to completing a finalized Memorandum of Agreement (MOA) pursuant to the NHPA, an Unanticipated Discovery Plan, and all cultural surveys is inconsistent with the requirements of the NHPA and NEPA.⁴⁷⁶ Confederated Tribes and Cow Creek Band also express concern about issuing the Authorization Order prior to completing consultation, stating that that approach does not meet the requirement to take a hard look at cultural resources;

⁴⁷¹ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 30.

⁴⁷² Authorization Order, 170 FERC ¶ 61,202 at P 251; Final EIS at 4-678 to 4-683 and 5-9.

⁴⁷³ Authorization Order, 170 FERC ¶ 61,202 at P 251, app., envtl. condition 30; Final EIS at 5-9.

⁴⁷⁴ Authorization Order, 170 FERC ¶ 61,202 at P 251; Final EIS at 5-9.

⁴⁷⁵ Authorization Order, 170 FERC ¶ 61,202 at P 253; Final EIS at 5-9.

⁴⁷⁶ Sierra Club Rehearing Request at 27-28; Confederated Tribes Rehearing Request at 18-22; Cow Creek Band Rehearing Request at 15-19.

challenge the adequacy of the consultation completed; and contend that instead of entering an MOA, the Commission should have pursued a Programmatic Agreement.⁴⁷⁷ Ms. McCaffree argues that the Authorization Order should not have been issued prior to completing the Historic Properties Management Plan, and in particular, that the order should have considered impacts to the McCullough Bridge.⁴⁷⁸ Confederated Tribes contend that the updates to the ethnographic survey should have been completed prior to the issuance of the Authorization Order and that the cultural resources surveys should have been completed earlier in the review process.⁴⁷⁹ Similarly, NRDC contends that because the Commission has not completed consultation under NHPA, the Authorization Order's consideration of environmental justice concerns is insufficient.⁴⁸⁰

155. The Commission has previously affirmed that a conditional certificate could be issued prior to completion of cultural resource surveys and consultation procedures required under NHPA because construction activities would not commence until surveys and consultation are complete,⁴⁸¹ consistent with the D.C. Circuit's decision in *City of Grapevine, Tex. v. Dep't of Transp.*, holding that the FAA properly conditioned approval of a runway project upon the applicant's subsequent compliance with the NHPA.⁴⁸² The prohibition on construction in the Authorization Order's Environmental Condition 30 ensures that there can be no effect on historic properties until there has been full compliance with the NHPA.⁴⁸³

156. With respect to the potential impacts to McCullough Bridge, we note that table L-14 of the Final EIS states that the bridge was listed on the National Register of Historic Places in 2005 and is located within or adjacent to the Pacific Connector Area of

⁴⁷⁷ Confederated Tribes Rehearing Request at 15, 22, 25, 27, 29; Cow Creek Rehearing Request at 4-7, 15-24.

⁴⁷⁸ McCaffree Rehearing Request at 28.

⁴⁷⁹ Confederated Tribes Rehearing Request at 15, 18.

⁴⁸⁰ NRDC Rehearing Request at 93.

⁴⁸¹ See generally *Iroquois Gas Transmission System, L.P.*, 53 FERC ¶ 61,194, at 61,758-64 (1990).

⁴⁸² 17 F.3d at 1509 (upholding the agency's conditional approval because it was expressly conditioned on the completion of section 106 process).

⁴⁸³ See *City of Grapevine*, 17 F.3d at 1509 (upholding Federal Aviation Administration's approval of a runway conditioned upon the applicant's completion of compliance with the NHPA).

Potential Effect (APE) but concludes that Pacific Connector will avoid the site by horizontal directional drilling. Accordingly, we find that further consultation with respect to the McCullough Bridge will not be required.

157. The Commission's approach appropriately respects the integration of the various requirements for natural gas infrastructure, including the NGA, the NHPA, and NEPA. We believe this approach is consistent with the court's conclusion in *Mid States Coalition for Progress v. Surface Transportation Board* that while "an agency may not require consultation in lieu of taking its own 'hard look' at the environmental impact of a project, we do not believe that NEPA is violated when an agency, after preparing an otherwise valid Final EIS, imposes consultation requirements in conjunction with other mitigating conditions."⁴⁸⁴

158. Finally, the Commission will complete consultation and enter into an agreement with Oregon SHPO, the Advisory Council, the applicants, federal land-managing agencies, and consulting Indian tribes to resolve any adverse impacts to historic properties prior to authorizing construction.⁴⁸⁵ We disagree that we must complete consultation under the NHPA prior to analyzing the environmental justice impacts of a proposed project; and, petitioners cite no requirement under the NHPA that mandates this result.

2. Traditional Cultural Property Historic District

159. Jordan Cove and Pacific Connector assert that the Authorization Order erred in failing to undertake an independent review of the Oregon SHPO's finding of eligibility with respect to the proposed Traditional Cultural Property (TCP) historic district nominated by Confederated Tribes for listing in the National Register of Historic Places.⁴⁸⁶ According to the petitioners, the Commission's acceptance of the Oregon SHPO's findings without an independent assessment amounts to a failure of reasoned decision-making. Petitioners also raise concerns about the Oregon SHPO's process for determining eligibility and identified some specific substantive issues with the TCP

⁴⁸⁴ 345 F.3d 520, 554 (8th Cir. 2003).

⁴⁸⁵ See Authorization Order, 170 FERC ¶ 61,202 at P 259 (citing Final EIS at 5-9). Commission staff's draft agreement document was characterized as a draft MOA. In accordance with the Advisory Council's January 15, 2020 Comments on the draft MOA, the final agreement document will be characterized as a Programmatic Agreement. See Advisory Council's January 15, 2020 Comment on the MOA at 25-26.

⁴⁸⁶ Jordan Cove and Pacific Connector Rehearing Request at 5-17.

nomination. Relatedly, Confederated Tribes asks for clarification on the grounds for the TCP eligibility determination.⁴⁸⁷

160. For the purposes of conducting environmental review for the certificate proceeding, staff determined that the TCP nomination met the eligibility criteria spelled out in 36 C.F.R. § 60.4 (2019). The Authorization Order explained that when the Commission determines if a property is eligible for listing on the National Register for Historic Properties, it does so in consultation with the SHPO, and that generally, the Commission agrees with the opinions of the SHPO on findings of eligibility.⁴⁸⁸ In this case, that consultation has yet to conclude. The Authorization Order noted that the National Park Service rejected the SHPO's nomination of the TCP as property eligible for listing.⁴⁸⁹ However, the National Park Service stated that its rejection was based on procedural grounds and substantive deficiencies that the SHPO could cure if it resubmits the eligibility determination for the TCP.⁴⁹⁰

161. The Authorization Order specified that in making an eligibility determination, the Oregon SHPO considered arguments against the nomination raised by Jordan Cove and others.⁴⁹¹ Further, Commission staff acknowledged the objections to the nomination in the draft agreement document sent to the consulting parties for review on December 13, 2019.⁴⁹² Notwithstanding the fact that, as noted above, consultation with all parties on this issue is ongoing, we affirm our decision to agree with the eligibility determination made by the SHPO.

H. Vessel Traffic

162. Ms. McCaffree asserts that the Commission failed to sufficiently consider the suitability of the Coos Bay Channel for vessel traffic to and from the Jordan Cove LNG Terminal, and failed to appropriately condition the order so as to require Jordan Cove's compliance with Coast Guard's requirements, as laid out in Coast Guard's May 10, 2018

⁴⁸⁷ Confederate Tribes Rehearing Request at 38-45.

⁴⁸⁸ Authorization Order, 170 FERC ¶ 61,202 at P 283.

⁴⁸⁹ *Id.* P 282.

⁴⁹⁰ Oregon Parks and Recreation Department, State Historic Preservation Office July 26, 2019 Letter at 3-9 (containing National Park Service July 2, 2019 eligibility determination letter).

⁴⁹¹ *Id.* P 282.

⁴⁹² *Id.*

Letter of Recommendation.⁴⁹³ Ms. McCaffree argues that, without ensuring Jordan Cove complies with Coast Guard's Letter of Recommendation, the Coos Bay Channel is not a suitable waterway for the vessel traffic that would result from construction and operation of the Jordan Cove LNG Terminal.⁴⁹⁴ Ms. McCaffree further states that because the Coos Bay Channel is narrow, operation of the Jordan Cove LNG Terminal, including vessel traffic, poses significant safety risks.⁴⁹⁵

163. As Commission staff stated in the Final EIS, “[t]he Coast Guard exercises regulatory authority over LNG marine vessels[.]”⁴⁹⁶ Accordingly, the Commission has no authority to approve, disapprove, or otherwise condition the Coast Guard's finding of whether or not a waterway is suitable to handle the vessel traffic attributable to an LNG terminal. As the Commission noted in the Authorization Order, on May 10, 2018, the Coast Guard “issued a Letter of Recommendation, indicating the Coos Bay Channel would be suitable for accommodating the type and frequency of LNG marine traffic associated with the Jordan Cove LNG Terminal.”⁴⁹⁷ Similarly, the Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) has authority to determine whether or not the siting of LNG facilities complies with federal safety standards.⁴⁹⁸ While the Commission incorporates these determinations into assessing the safety risks associated with a proposed LNG terminal, it does not have the authority to make these determinations itself. If Ms. McCaffree has concerns regarding the Coast Guard's Letter of Recommendation or Waterway Suitability Assessment for the Coos Bay Channel, she may file those concerns with the Coast Guard. Further, Environmental Condition 35 and 125 of the Authorization Order requires Jordan Cove and Pacific Connector to provide documentation that they have complied with DOT regulations and that the U.S. Coast Guard determines appropriate measures have been put into place by Jordan Cove or other appropriate parties prior to initial site preparation and commencement of construction, respectively.⁴⁹⁹

⁴⁹³ McCaffree Rehearing Request at 25-28.

⁴⁹⁴ *Id.*

⁴⁹⁵ *Id.* at 27-28.

⁴⁹⁶ Final EIS at 7-744.

⁴⁹⁷ Authorization Order, 170 FERC ¶ 61,202 at P 264.

⁴⁹⁸ *Id.* P 265.

⁴⁹⁹ *Id.* at app., envtl. conditions 35 and 125.

I. State and Local Economic Impacts

164. Ms. McCaffree and the State of Oregon contend that the Commission failed to adequately consider negative state and local economic impacts to housing availability and cost, the tourism and recreation industry, the Dunes National Recreation area and Scenic Adventure Coast, commercial fishing, the commercial crab fishery, and recreational fishing.⁵⁰⁰

165. We believe we did consider these impacts in the Authorization Order. In considering socioeconomic impacts of the project, the Authorization Order acknowledged that construction of the Jordan Cove LNG Terminal and Pacific Connector Pipeline would impact socioeconomic resources including tourism, recreation, and fishing, and would cause significant impacts (additional usage) on short-term housing in Coos County.⁵⁰¹ The limited short-term housing availability that would occur as a result of construction of the projects could also affect tourism, as visitors would have to compete with construction workers for housing.⁵⁰² The projects could also affect supplemental subsistence activities, commercial fishing, and commercial oyster farms, but these impacts would not be significant.⁵⁰³ The likelihood of the pipeline resulting in a long-term decline in property values is low.⁵⁰⁴ The Authorization Order also found that the projects will provide direct employment opportunities for local workers, support other local and state services and industries, and generate local, state, and federal tax revenues.⁵⁰⁵

166. With respect to concerns raised about commercial and recreational fishing and crab fisheries, the Final EIS finds that increased sedimentation from dredging is not expected to result in long-term or population-wide effects on crabs.⁵⁰⁶ The Authorization

⁵⁰⁰ McCaffree Rehearing Request at 14; State of Oregon Rehearing Request at 32-33.

⁵⁰¹ Authorization Order, 170 FERC ¶ 61,202 at P 239; Final EIS at 4-652.

⁵⁰² Final EIS at 4-619, 4-644, and 4-652.

⁵⁰³ *Id.* at 4-619 to 4-621, 4-644 to 4-645, 5-8.

⁵⁰⁴ *See* Final EIS at 4-635. The Final EIS acknowledges that it is not possible to ascertain from the limited information available whether property values near the Jordan Cove LNG Terminal would be affected. *Id.* at 4-614.

⁵⁰⁵ *Id.* at 4-614 to 4-616 and 4-635 to 4-639.

⁵⁰⁶ Final EIS at 4-621.

Order also explains that the Final EIS finds that the spatial restrictions will not significantly affect recreational and commercial fisheries as the restrictions would be in place for approximately 20 to 30 minutes, similar to the timeframe for other deep-draft vessels using the channel.⁵⁰⁷ Finally, the Authorization Order also notes that the Final EIS considers project impacts on recreation and tourism and found the impacts would be short-term and temporary.⁵⁰⁸ We find that state and local economic impacts have been adequately addressed in the Authorization Order and Final EIS and deny rehearing on this issue.

J. Vegetation

167. The State of Oregon contends that the Final EIS does not sufficiently analyze the Pacific Connector Pipeline's impacts to oak woodland, juniper woodland, and shrub steppe, or provide sufficient mitigation measures for these impacts.⁵⁰⁹

168. We disagree. The Final EIS provides a detailed accounting of the impacts to forested, woodland, and shrubland vegetation, including both juniper and oak woodlands, as well as shrubland, from construction and operation of the Pacific Connector Pipeline.⁵¹⁰ As detailed in the Final EIS, construction of the Pacific Connector Pipeline would result in impacts to approximately: 108 acres of western juniper (and Ponderosa pine) woodland, 126 acres of white oak forest and woodland, and 305 acres of shrubland.⁵¹¹ These impacts account for only approximately 2.6%, 3.0%, and 7.3% of the Pacific Connector Pipeline's total vegetation impacts, respectively.⁵¹² Operation of the Pacific Connector Pipeline would impact approximately 30 acres of western juniper and Ponderosa pine forest and woodland, 27 acres of white oak and Ponderosa pine woodland, and 87 acres of shrubland.⁵¹³ Impacts on vegetation include temporary and permanent loss, potential revegetation challenges, a potential increase in noxious weeds and invasive species, forest

⁵⁰⁷ Authorization Order, 170 FERC ¶ 61,202 at n.503; Final EIS at 4-620.

⁵⁰⁸ Authorization Order, 170 FERC ¶ 61,202 at PP 234-236.

⁵⁰⁹ State of Oregon Rehearing Request at 51, 75.

⁵¹⁰ Final EIS at 4-167 to 4-170, tbl.4.4.2.4-1, 4.4.2.4-2.

⁵¹¹ *Id.* at 4-167 to 4-168, tbl.4.4.2.4-1 (pp.). For context, the Jordan Cove and Pacific Connector projects are anticipated to impact over 4,600 acres of vegetation. *Id.* at 5-4.

⁵¹² *Id.*

⁵¹³ *Id.* at 4-168 to 4-170, tbl.4.4.2.4-1.

fragmentation, and edge effects.⁵¹⁴ The Final EIS does not identify oak or juniper woodland, and identified only minimal (less than one acre) amounts of shrubland in the Jordan Cove LNG Terminal area.⁵¹⁵ The Final EIS further discusses Pacific Connector's mitigation measures to reduce impacts to vegetation and restore disturbed areas, including (but not limited to) measures to decrease forest fragmentation, and Pacific Connector's *Erosion Control and Revegetation Plan, Leave Tree Protection Plan, Integrated Pest Management Plan, Fire Prevention and Suppression Plan, and the Soil Prevention Containment and Countermeasures Plan*.⁵¹⁶ In addition, the Final EIS notes that while these measures would be applied along the entire route of the Pacific Connector Pipeline, the Forest Service and the BLM would require additional measures to further reduce impacts to vegetation on federal lands.⁵¹⁷ Accordingly, the Final EIS⁵¹⁸ and the Authorization Order⁵¹⁹ appropriately concluded that the impacts to vegetation would not be significant. We affirm this finding.

K. Wildlife

169. NRDC asserts that the Final EIS' analysis of the projects' impacts on wildlife failed to satisfy NEPA.⁵²⁰ Specifically, NRDC contends that the Final EIS does not appropriately consider impacts to bald eagles, migratory birds, and whales.⁵²¹

170. NRDC states that the Final EIS' analysis of impacts to bald eagles was insufficient, and that the Authorization Order should have included a condition specifically requiring Jordan Cove and Pacific Connector file evidence of having obtained a permit pursuant to the Bald and Golden Eagle Protection Act (Eagle Act).⁵²² NRDC requests that the Commission clarify that Jordan Cove and Pacific Connector may

⁵¹⁴ *Id.* at 4-165 to 4-166.

⁵¹⁵ *Id.* at 4-153, 4-156.

⁵¹⁶ *Id.* at 4-171 to 4-173.

⁵¹⁷ *Id.* at 4-173.

⁵¹⁸ *Id.* at 5-4.

⁵¹⁹ Authorization Order, 170 FERC ¶ 61,202 at P 211.

⁵²⁰ NRDC Rehearing Request at 75-87.

⁵²¹ *Id.* at 75.

⁵²² *Id.* at 76 (citing 16 U.S.C. § 668c (2018)).

not commence construction until they obtain an Eagle Act permit from FWS, or presents evidence that FWS found such a permit was not needed.⁵²³

171. Contrary to NRDC's claims, the Final EIS provides a sufficient accounting of bald eagles in the vicinity of the projects, as well as an analysis of potential impacts to bald eagles from construction and operation of the projects.⁵²⁴ The Final EIS states that the draft *Migratory Bird Conservation Plan* incorporates FWS' recommended spatial buffers for bald eagle nests in the vicinity of the Pacific Connector Pipeline to reduce these potential impacts.⁵²⁵ In addition, as stated in the Final EIS, the Commission has entered into an MOU with FWS to promote best practices to avoid and reduce impacts on birds, including the bald eagle, and Jordan Cove and Pacific Connector continue to work with FWS under the Eagle Act.⁵²⁶ As discussed above, the fact that Jordan Cove and Pacific Connector are still working with FWS in compliance with the Eagle Act does not render staff's issuance of the Final EIS, or of the Commission's Authorization Order unlawful or inappropriate.⁵²⁷ Further, we find clarifying the Authorization Order in the manner requested by NRDC to be unnecessary. As NRDC notes, Environmental Condition 11 of the Authorization Order requires Jordan Cove and Pacific Connector to present documentation that they have obtained all necessary federal approvals, or evidence of waiver thereof, prior to commencing construction.⁵²⁸ This includes the Eagle Act.

172. NRDC asserts that the Commission's determination that the project would not significantly affect migratory birds is "premature and irrational" because Jordan Cove's and Pacific Connector's draft *Migratory Bird Conservation Plan* is not finalized, and consultation with FWS to finalize the plan is ongoing.⁵²⁹ NRDC further claims that the assessment of impacts to migratory birds must be revised in light of the Department of

⁵²³ *Id.* at 76-77.

⁵²⁴ Final EIS at 4-188, 4-203 to 4-208.

⁵²⁵ *Id.* at tbl.4.5.1.2-8 (4-226).

⁵²⁶ *Id.* at 4-198, 4-227; 1-23.

⁵²⁷ *See supra* P 75.

⁵²⁸ NRDC Rehearing Request at 77 (citing Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 11).

⁵²⁹ *Id.* at 78.

the Interior's changing perspective of the reach of the Migratory Bird Treaty Act (MBTA).⁵³⁰

173. As stated above, reliance on a draft mitigation plan is appropriate.⁵³¹ As noted in the Final EIS, FWS has authority under the MBTA to protect migratory birds;⁵³² and, similar to a Biological Opinion, the Commission may rely on FWS' determination of compliance with the MBTA, as well as its interpretation of the MBTA.⁵³³ The Final EIS lists the various types of migratory birds in the vicinity of the projects⁵³⁴ and assesses the potential impacts of the projects on these species.⁵³⁵ Commission staff determined that although migratory birds would be affected by construction and operation of the projects (primarily from habitat modification), Jordan Cove's and Pacific Connector's proposed mitigation measures such as clearing vegetation outside the fledging period, surveying and removal of raptor nests, and additional avoidance, minimization, and mitigation measures in the final *Migratory Bird Conservation Plan*, would adequately reduce impacts and that construction and operation of the projects would not significantly impact migratory birds.⁵³⁶ We affirm this finding.

174. NRDC disputes the findings in the Final EIS regarding the impacts of construction and operation of the Jordan Cove LNG Terminal on Southern Resident orcas and gray whales.⁵³⁷ NRDC asserts that the Final EIS incorrectly assessed the impacts to Southern Resident orcas from ship strikes and impacts to the orcas' prey population and foraging habitat, and states that the Final EIS underestimated the gray whale population in the vicinity of Coos Bay.⁵³⁸

175. The Final EIS finds that, based on available resources, Southern Resident orcas make rare use of the Coos Bay area, and that gray whales are found in the area "only on

⁵³⁰ *Id.* at 78-80.

⁵³¹ *See supra* P 167.

⁵³² *See* NRDC's Rehearing Request at 78-80; Final EIS at 1-13.

⁵³³ *See infra* PP 223.

⁵³⁴ *Id.* at 4-187 to 4-190.

⁵³⁵ *Id.* at 4-196 to 4-198, 4-224 to 4-227.

⁵³⁶ *Id.*

⁵³⁷ NRDC Rehearing Request at 80-85.

⁵³⁸ *Id.*

an occasional basis.”⁵³⁹ Accordingly, Commission staff determined that the risk of ship strikes on either of these species is “very low.”⁵⁴⁰ Commission staff determined that construction and operation of the Jordan Cove LNG Terminal was not likely to adversely affect either the Southern Resident orca or the gray whale, due to the low numbers of whales in the area, the lack of impacts to prey species from construction and operation of the project, the measures included in the *Marine Mammal Monitoring Plan*, (including a commitment to stop pile driving activities when whales are found in Coos Bay), and a determination that the project would not adversely modify proposed critical habitat for the Southern Resident orca, or have any impact on designated critical habitat units.⁵⁴¹ Despite NRDC’s assertions, we find that the Final EIS appropriately considers the project’s impacts on marine mammals, including the Southern Resident orca and the gray whale. These determinations were affirmed in the National Marine Fisheries Service’s Biological Opinion.⁵⁴²

176. The State of Oregon contends that impacts to forest habitat were not adequately considered.⁵⁴³ In support, the State of Oregon notes that the Biological Assessment does not include the Blue Ridge Variation, and that otherwise the Final EIS does not adequately consider impacts to critical habitat for the marbled murrelet and northern spotted owl, asserting that commitments to restrict tree clearing during these species’ breeding periods does not mitigate for the impacts to their habitat.⁵⁴⁴ The State of Oregon also asserts that the Final EIS does not adequately consider or analyze offsite mitigation for these species.⁵⁴⁵

177. The State of Oregon is incorrect in stating that the Biological Assessment does not consider the Blue Ridge Variation.⁵⁴⁶ Appendix R (Alternatives) of the Biological Assessment examined the difference in impacts to listed species from a number of alternatives, including the Blue Ridge Alternative, and ultimately determined that

⁵³⁹ Final EIS at 4-330.

⁵⁴⁰ *Id.*

⁵⁴¹ Final EIS at 4-332 to 4-334.

⁵⁴² *See* NMFS January 10, 2020 Biological Opinion at 3.

⁵⁴³ State of Oregon Rehearing Request at 73-74.

⁵⁴⁴ *Id.*

⁵⁴⁵ *Id.* at 74.

⁵⁴⁶ State of Oregon Rehearing Request at 50.

incorporating the Blue Ridge Alternative would not result in a change to any of Commission staff's findings.⁵⁴⁷ Further, despite the State of Oregon's assertion, Commission staff appropriately considered impacts to the habitat of both the marbled murrelet and the northern spotted owl, as well as all mitigation measures. The Final EIS considered the impacts to habitat for the marbled murrelet and northern spotted owl and discloses the impacts to their habitat, as well as known occupied or presumed occupied sites, for both species.⁵⁴⁸ The Final EIS further discusses Pacific Connector's proposed mitigation measures in addition to avoiding tree clearing during each species' breeding season, including replanting trees, funding off-site mitigation, funding a program to reduce corvid predation of marbled murrelet nests, and sponsoring programs on BLM land (such as fire suppression and road decommissioning) intended to benefit the northern spotted owl.⁵⁴⁹

178. Even with these mitigation measures, however, Commission staff ultimately determined that the Pacific Connector Pipeline is likely to adversely affect critical habitat for the marbled murrelet and the northern spotted owl,⁵⁵⁰ a determination echoed in FWS' January 31, 2020 Biological Opinion.⁵⁵¹ However, FWS also determined that the Pacific Connector Pipeline is not likely to result in the destruction or adverse modification of critical habitat for the marbled murrelet and the northern spotted owl. In addition, Environmental Condition 24 of the Authorization Order requires Pacific Connector to file, prior to construction, its commitment to adhere with FWS' recommended timing restrictions within threshold distances of marbled murrelet and northern spotted owl stands during construction, operation, and maintenance of the Pacific Connector Pipeline, and Environmental Condition 25 requires Pacific Connector to conduct surveys of all suitable marbled murrelet and northern spotted owl habitat, and file the results of these surveys with the Commission, prior to construction.⁵⁵² Therefore, we find that impacts on critical habitat for the marbled murrelet and northern spotted owl have been sufficiently assessed.

⁵⁴⁷ See Commission Staff's July 29, 2019 Biological Assessment, Appendix R – Alternatives.

⁵⁴⁸ Final EIS at 4-338 to 4-346.

⁵⁴⁹ *Id.*

⁵⁵⁰ Final EIS at 4-341, 4-345.

⁵⁵¹ See FWS' January 31, 2020 Biological Opinion at 104, 166.

⁵⁵² Authorization Order, 170 FERC ¶ 61,202 at app., envtl. conds. 24, 25.

179. The State of Oregon also takes issue with Pacific Connector's *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations*, asserting that it does not provide sufficient site-specific measures to mitigate for releases of drilling fluids on waterbodies, which the State of Oregon asserts could have adverse impacts on salmonid and other aquatic species.⁵⁵³ The State of Oregon further contends that the Authorization Order's reliance on the *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* in determining that impacts to surface water resources would not be significant is arbitrary and capricious.⁵⁵⁴ The *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* requires mitigation measures proposed by Pacific Connector, but as we discuss in greater detail below, the Final EIS and Authorization Order sufficiently address the potential adverse impacts of HDD,⁵⁵⁵ as well as potential impacts to aquatic resources,⁵⁵⁶ and determined there would be no significant impacts.

L. Landowner Impacts

180. Sierra Club claims that the Commission failed to properly assess the numerous impacts that construction and operation of the projects would have on "landowners' land use and way of life."⁵⁵⁷

181. First, Sierra Club contends that the Final EIS' analysis of impacts to landowners cannot have been adequate, as it used incorrect data to estimate the number of landowners Pacific Connector Pipeline contacted to negotiate easements.⁵⁵⁸ Sierra Club states that the easement numbers relied on in the Authorization Order are based on Pacific Connector's proposed route, and do not reflect the additional landowners Pacific Connector will need to obtain easements from as a result of the Authorization Order approving the modified project route, which incorporates the Blue Ridge Variation.⁵⁵⁹

⁵⁵³ State of Oregon Rehearing Request at 50-55.

⁵⁵⁴ *Id.* at 53.

⁵⁵⁵ *See infra* P 183.

⁵⁵⁶ Final EIS at 4-235 to 4-317.

⁵⁵⁷ Sierra Club Rehearing Request at 70.

⁵⁵⁸ *Id.* at 70-71.

⁵⁵⁹ *Id.*

182. As an initial matter, we note that Commission staff's assessment of impacts to landowners is entirely independent of the status of easement negotiations. Sierra Club is correct that incorporating the Blue Ridge Variation into the approved route for the Pacific Connector Pipeline impacts the overall project length, and the number of impacted landowners.⁵⁶⁰ Sierra Club fails, however, to demonstrate that the increased project length and number of impacted landowners renders the Final EIS' assessment to landowners inadequate in any way. Pacific Connector is required to obtain access to property necessary for construction and operation of the pipeline, including all impacted landowners along the Blue Ridge Variation, prior to construction. Further, newly affected parcels are subject to Pacific Connector's and the Commission's Plan and Procedures designed to avoid, reduce, and mitigate landowner impacts. We note that Sierra Club does not point to any different types of land uses located along the Blue Ridge Variation, as compared to the proposed route.⁵⁶¹ Thus, Sierra Club fails to demonstrate how the incorporation of the Blue Ridge Alternative into the project route makes the assessment of landowner impacts inadequate.

183. Sierra Club states that the Final EIS and Authorization Order did not sufficiently account for private wells along the route of the Pacific Connector Pipeline.⁵⁶² Sierra Club refers to the Final EIS' accounting of seven privately-owned wells within 200 feet of construction of the pipeline "absurd", because it relied on a State of Oregon provided database to research well locations in the state.⁵⁶³ The Final EIS notes that "[the Oregon Water Resources Department] ... maintains a database of water well locations" and that Pacific Connector Pipeline used the "database for their applications to the FERC."⁵⁶⁴ The Final EIS further states that there are private wells along the pipeline route "that are exempt from water rights permitting" and that their locations are not currently known.⁵⁶⁵ Accordingly the seven private wells identified using the State of Oregon Water Resources Department's database were the wells Pacific Connector was able to identify that were within 200 feet of the pipeline construction right-of-way, and were available using the

⁵⁶⁰ See Authorization Order, 170 FERC ¶ 61,202 at P 270; Final EIS at 3-24.

⁵⁶¹ The Final EIS identifies the differences in land ownership and number of land parcels in a comparison between the proposed route and the Blue Ridge Variation and identified one residence within 50 feet of the construction right-of-way along the Blue Ridge Variation. See Final EIS at 3-28, tbl. 3.4.2.2-1.

⁵⁶² Sierra Club Rehearing Request at 71-74.

⁵⁶³ *Id.* at 72.

⁵⁶⁴ Final EIS at 1-36.

⁵⁶⁵ *Id.* at 4-81.

database.⁵⁶⁶ Sierra Club did not present evidence of any other wells within 200 feet of construction of the pipeline that the Final EIS should, but does not, include in its analysis. The Final EIS acknowledges that Pacific Connector will likely encounter additional wells; therefore, Pacific Connector will request impacted landowners to identify private wells and their uses.⁵⁶⁷ The Final EIS further states that Pacific Connector would develop site-specific mitigation measures to prevent impacts to private wells located within 200 feet of construction of the project, which would take into account the use(s) of the well (i.e. irrigation, home use, etc.).⁵⁶⁸ Thus, we find that the Final EIS appropriately considers impacts to landowners' wells.

184. Sierra Club further states that Pacific Connector's *Groundwater Supply Monitoring and Mitigation Plan* (Groundwater Supply Plan) is flawed, and that the Final EIS and Authorization Order fail to address these (purported) deficiencies.⁵⁶⁹ Specifically, Sierra Club asserts that 1) the Groundwater Supply Plan and the Commission fail to identify wells located on property needed for construction and operation of the Pacific Connector Pipeline; 2) the Groundwater Supply Plan's pre-construction well monitoring requirements are unclear; 3) landowners should not be required to establish that their well has been damaged, rather, Jordan Cove should show they were not responsible; 4) in addition to wells, seeps and springs should be monitored; 5) the well monitoring schedule is inadequate; 6) the Groundwater Supply Plan does not state where the Spill Prevention, Containment, and Countermeasures Plan can be located; and 7) Pacific Connector's commitment to work with landowners in the event groundwater supply is impacted is not explained sufficiently.⁵⁷⁰

185. The Final EIS analyzes the potential impacts to groundwater, including wells, that would occur from construction and operation of the project.⁵⁷¹ As discussed above, all wells that could be identified using the State of Oregon's database were included in the Final EIS, however additional wells may still be encountered, and therefore Pacific Connector will request impacted landowners to identify all wells, and their uses.⁵⁷²

⁵⁶⁶ *Id.*

⁵⁶⁷ *Id.*

⁵⁶⁸ *Id.*

⁵⁶⁹ Sierra Club Rehearing Request at 74-77.

⁵⁷⁰ *Id.*

⁵⁷¹ Final EIS at 4-35 to 4-36; 4-79 to 4-85.

⁵⁷² *See supra* P 183.

Pacific Connector will conduct pre-construction monitoring to identify, and further monitor all groundwater sources, including springs, seeps, and wells.⁵⁷³ Impacted landowners will also be able to negotiate with Pacific Connector during the easement process to adjust the alignment of the pipeline to increase the distance between the pipeline and groundwater sources, and, if requested, Pacific Connector will conduct post-construction groundwater sampling to determine if groundwater sources were impacted.⁵⁷⁴ In the event a groundwater supply is impacted, Pacific Connector would work with the landowner to develop mitigation measures that would satisfy the needs of the individual landowner.⁵⁷⁵ As noted in the Final EIS, Pacific Connector's *Spill Prevention, Containment, and Countermeasures Plan* was included in appendices F.2 and G.2 of Resource Report 2 of Pacific Connector's application.⁵⁷⁶ The Final EIS determines that impacts to groundwater, including wells, would be temporary, and not significant,⁵⁷⁷ and we concur with Commission staff's determination.

186. Sierra Club contends that the Final EIS and Authorization Order fail to address the adverse effects of horizontal directional drilling (HDD), including the risk of sediment and other drilling material being released into aquatic resources (known as a "frac-out") and the impacts such events could have on landowners.⁵⁷⁸ Sierra Club is mistaken; the Final EIS notes that Pacific Connector developed a *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* which would be utilized in the event of a frac-out.⁵⁷⁹ This contingency plan utilizes measures including the halting of HDD drilling operations, developing site-specific mitigation plans, and if possible, removing the drilling mud from the environment, among other measures.⁵⁸⁰ Further, as discussed in the Authorization Order, because Pacific Connector has not yet identified all fluids and additives that would be used during HDD activities, Environmental Condition 18 requires Pacific Connector to file a list of all proposed drilling additives for Commission approval

⁵⁷³ Final EIS at 4-83.

⁵⁷⁴ *Id.*

⁵⁷⁵ *Id.* 4-83.

⁵⁷⁶ *Id.* at 2-51.

⁵⁷⁷ *Id.* at 4-85.

⁵⁷⁸ Sierra Club Rehearing Request at 77.

⁵⁷⁹ Final EIS at 4-277.

⁵⁸⁰ *Id.*

prior to construction.⁵⁸¹ Therefore, we find the Final EIS and Authorization Order appropriately consider the potential adverse effects of HDD.

187. Sierra Club alleges that the Authorization Order and Final EIS fail to evaluate the negative impact construction and operation will have on property values, as well as other impacts to factors incident to property ownership, including homeowners insurance.⁵⁸² Sierra Club asserts that the six studies that Commission staff relied on in determining that there was a low likelihood of a decrease in property values attributable to the Pacific Connector Pipeline are somehow faulty.⁵⁸³ The Final EIS acknowledges that “the effect a pipeline may have on a property’s value depends on many factors, including the size of the tract, the values of adjacent properties, the presence of other utilities, the current value of the land, and the current land use” and further stated that decisions of whether or not to purchase property are generally based on the proposed use of the property rather than subjective valuation due to the presence of a pipeline.⁵⁸⁴ Thus, the Final EIS appropriately concludes, based on the studies consulted, that the pipeline is not likely to negatively impact property values.⁵⁸⁵ While Sierra Club disagrees with this finding, this disagreement does not show that the Commission’s decision-making process was uninformed, or lacking under NEPA. “If supported by substantial evidence, the Commission’s findings of fact are conclusive.”⁵⁸⁶ Further, the Final EIS states that there is no verifiable information, or documented cases indicating the presence of a pipeline complicates a property owner’s efforts to obtain homeowners insurance and a mortgage, and Sierra Club fails to present any additional information that would suggest this has, or does, occur.⁵⁸⁷

188. Sierra Club asserts that the Final EIS and Authorization Order fail to assess impacts to visual resources, and how these impacts affect property values.⁵⁸⁸ Sierra Club

⁵⁸¹ Authorization Order, 170 FERC ¶ 61,202 at P 207, app. envtl. cond. 18.

⁵⁸² Sierra Club Rehearing Request at 77-79.

⁵⁸³ *Id.*

⁵⁸⁴ Final EIS at 4-635.

⁵⁸⁵ *Id.*

⁵⁸⁶ *Myersville*, 783 F.3d at 1308 (quoting *B & J Oil & Gas v. FERC*, 353 F.3d 71, 76 (D.C. Cir. 2004) (citing 15 U.S.C. § 717r(b))).

⁵⁸⁷ *Id.*

⁵⁸⁸ Sierra Club Rehearing Request at 79-80.

further states that the Final EIS does not justify its use of a 5-mile viewshed for assessing visual resource impacts.⁵⁸⁹ We disagree. The Final EIS assesses the visual impacts of both the Pacific Connector Pipeline and Jordan Cove LNG Terminal in significant detail, analyzing the short- and long-term visual resource impacts from several different viewsheds, and determines that these impacts would not be significant.⁵⁹⁰ The Final EIS identifies the 5-mile viewshed as “the foreground/midground distance zone as described in the BLM Visual Resource Management (VRM) system, and corresponds to the potential viewing range within which visible aspects of the Project (primarily the cleared right-of-way) are most likely to be noticeable to the casual observer.”⁵⁹¹ In the Final EIS, Commission staff recognizes that some “identifiable affected interests”, including those who live near a pipeline right-of-way or travel near it frequently, may place a higher value on these resources.⁵⁹² We find that the Final EIS sufficiently assessed the potential impacts to visual resources. Sierra Club’s concerns regarding property values are fully addressed above.⁵⁹³

189. Sierra Club claims that the Final EIS fails to assess the adverse impacts from Pacific Connector using herbicide to maintain its pipeline right-of-way.⁵⁹⁴ Sierra Club further contends that there is not a sufficient monitoring program in place to prevent the spread of invasive species and noxious weeds after construction.⁵⁹⁵ The Final EIS states that Pacific Connector will use only approved herbicides and will implement measures to prevent the spread of herbicides, including pausing herbicide treatments when rain is anticipated in the next 24 hours, and the use of buffers to prevent the spread of herbicides to sensitive sites.⁵⁹⁶ Sierra Club does not present any evidence of the types of herbicide-related harms it anticipates, outside of landowners’ preference to use organic herbicide on their property. In addition, the Final EIS discusses Pacific Connector’s *Integrated Pest Management Plan*, which contains measures to prevent the spread of noxious weeds and

⁵⁸⁹ *Id.*

⁵⁹⁰ Final EIS at 5-587 to 4-601.

⁵⁹¹ *Id.* at 4-588.

⁵⁹² *Id.* at 4-608.

⁵⁹³ *See supra* P 187.

⁵⁹⁴ Sierra Club Rehearing Request at 80-82.

⁵⁹⁵ *Id.* at 81-82.

⁵⁹⁶ Final EIS at 4-176.

invasive species, including the use of herbicides.⁵⁹⁷ The Final EIS explains how Pacific Connector would monitor the pipeline right-of-way for infestations of noxious weeds and invasive plant species, and address these infestations if they occur.⁵⁹⁸

190. Sierra Club asserts that the Final EIS and Authorization Order do not sufficiently address how the construction and operation of the Pacific Connector Pipeline will impact landowners' ability to utilize timber on their property.⁵⁹⁹ Sierra Club claims that the Final EIS does not address how landowners will be able to continue to cut timber after the pipeline has been constructed.⁶⁰⁰ Contrary to Sierra Club's assertions, the Final EIS addresses the project's impacts on timber cutting,⁶⁰¹ explaining that during operation timber operations may continue, and timber operators can cross the right-of-way with "heavy hauling and logging equipment", as long as there is proper coordination with Pacific Connector, and precautions are taken to preserve the integrity of the pipeline.⁶⁰² The Final EIS determines that logging operations would not be significantly impacted, nor would the cost of logging significantly increase, although the requirement to coordinate with Pacific Connector may be an inconvenience for some.⁶⁰³ Accordingly, we find that the Final EIS sufficiently addressed impacts to timber operations.

191. Sierra Club asserts that the effects of the Pacific Connector Pipeline on landowners' planned property improvements are not adequately addressed.⁶⁰⁴ Sierra Club states that the construction and operation of the pipeline will negatively impact or otherwise prevent landowners from undertaking plans for improvements on their property.⁶⁰⁵ As Sierra Club acknowledges, the Final EIS states that in several instances, landowners and Pacific Connector were able to reach an agreement to modify the

⁵⁹⁷ *Id.* at 4-173 to 4-176.

⁵⁹⁸ Final EIS at 4-176.

⁵⁹⁹ Sierra Club Rehearing Request at 82-83.

⁶⁰⁰ *Id.*

⁶⁰¹ Final EIS at 4-439; 4-443 to 4-446.

⁶⁰² *Id.* at 4-439.

⁶⁰³ *Id.* at 4-446.

⁶⁰⁴ Sierra Club Rehearing Request at 83-84.

⁶⁰⁵ *Id.*

pipeline route so as to avoid impacts on planned improvements.⁶⁰⁶ For instances in which impacts to planned property improvements were unavoidable, determining appropriate compensation for the impacts to the landowners' planned improvement is a matter between the landowner and Pacific Connector.

192. Sierra Club asserts that the "psychological effects on landowners" caused by a project that has been pending for over 15 years, have not been assessed.⁶⁰⁷ As the Commission has previously explained, a project's "potential psychological effect on landowners are beyond the scope of NEPA review."⁶⁰⁸

193. Finally, Sierra Club argues that the Final EIS and the Authorization Order fail to address how landowners may resume "normal activities such as timber harvesting" after construction of the pipeline, and that there is "little or no basis" for the conclusion that impacts to land use would not be significant.⁶⁰⁹ Sierra Club states that impacts on landowners' water sources, ability to irrigate, impacts from invasive species, insecticide and pesticide spraying, fire mitigation, and "unwanted intrusions" by third parties via the pipeline corridor were not addressed.⁶¹⁰

194. We address Sierra Club's concerns regarding timber harvesting above.⁶¹¹ In addition, concerns regarding impacts on water sources,⁶¹² irrigation and agriculture,⁶¹³ invasive species,⁶¹⁴ fire mitigation,⁶¹⁵ have been addressed in the Final EIS,

⁶⁰⁶ Final EIS at 4-443.

⁶⁰⁷ Sierra Club Rehearing Request at 84.

⁶⁰⁸ *S. Natural Gas Co.*, 86 FERC ¶ 61,129, at 61,444 (1999).

⁶⁰⁹ Sierra Club Rehearing Request at 84-85.

⁶¹⁰ *Id.* at 85.

⁶¹¹ *See supra* P 190.

⁶¹² *See supra* PP 183 - 185.

⁶¹³ *See, e.g., supra* P 190; Authorization Order, 170 FERC ¶ 61,202 at PP 201, 229; Final EIS at 4-438.

⁶¹⁴ *See, e.g., supra* PP 168, 189; Authorization Order, 170 FERC ¶ 61,202 at P 211, envtl. cond. 19; Final EIS at 4-157 to 4-159.

⁶¹⁵ *See, e.g., infra* PP 210 - 211; Authorization Order, 170 FERC ¶ 61,202 at P 211; Final EIS at 4-178 to 4-179, 4-460.

Authorization Order, and herein. As discussed in the Final EIS, Pacific Connector would implement a “Landowner Complaint Resolution Procedure” to enable landowners to register complaints with Pacific Connector, and landowners may further contact the Commission’s Dispute Resolution Division if they are not satisfied with Pacific Connector’s response to their complaint.⁶¹⁶ As discussed in Environmental Condition 10 in the Authorization Order, the complaint resolution procedure will provide landowners with instructions on how to register complaints regarding environmental mitigation problems or concerns, and will be available to landowners during construction and restoration of the Pacific Connector Pipeline, and two years after the completion of restoration activities.⁶¹⁷ Accordingly, we find this analysis provided sufficient basis for Commission staff’s conclusion that land use would not be significantly impacted.⁶¹⁸ That Sierra Club may disagree with our conclusion does not render our analysis insufficient under NEPA.

M. Safety

1. Aviation

195. Sierra Club and Ms. McCaffree assert that neither the Commission nor the Federal Aviation Administration (FAA) assessed the impacts of the Jordan Cove LNG Terminal’s thermal plume on aircraft operations at the nearby Southwest Oregon Regional Airport, particularly during takeoff and landing.⁶¹⁹ Petitioners contend that the only assessment of impacts by the agencies was the FAA’s determination, in its 2015 memorandum addressing the effects of thermal exhaust plumes, that “thermal exhaust plumes may pose a unique hazard to aircraft” and therefore “are incompatible with airport operations.”⁶²⁰

196. As petitioners note, the Final EIS acknowledges and incorporates the FAA’s 2015 memorandum regarding the risks of thermal exhaust plumes for aviation, particularly that

⁶¹⁶ Final EIS at 4-441.

⁶¹⁷ Authorization Order, 170 FERC ¶ 61,202 at envtl. cond. 10.

⁶¹⁸ See Final EIS 4-420 to 4-552; 5-6.

⁶¹⁹ Sierra Club Rehearing Request at 51-53; McCaffree Rehearing Request at 22-23.

⁶²⁰ See FAA Memorandum (Sept. 24, 2015), https://www.faa.gov/airports/environmental/land_use/media/technical-guidance-assessment-tool-thermal-exhaust-plume-impact.pdf.

they are “incompatible” with airport operations.⁶²¹ Petitioners fail, however, to examine the FAA’s 2015 memorandum in its entirety. The FAA prepared the memorandum in response to requests for information from state and local governments, as well as airport operators, on the appropriate distance between power plant exhaust stacks and airports.⁶²² As an initial matter, the memorandum clarifies that the FAA has no regulations protecting airports from plumes and other emissions from exhaust stacks, and only has regulations to limit exhaust stack height near airports.⁶²³ Contrary to the assertions of Sierra Club and Ms. McCaffree, the memorandum was not limited to the FAA’s determination that thermal exhaust plumes were incompatible with aviation. A full reading of the FAA’s 2015 memorandum demonstrates that, while the FAA did in fact determine that thermal exhaust plumes “*may* pose a unique hazard to aircraft in critical phases of flight” and that accordingly such plumes are “incompatible with airport operations,” the FAA also determined that “the overall risk associated with thermal exhaust plumes in causing a disruption of flight is low.”⁶²⁴ The 2015 memorandum further states that any such impact would be highly dependent on a variety of factors, including the proximity of the exhaust stacks to the airport flight path, the size and speed of the aircraft, and local weather patterns (wind, ambient temperatures, atmospheric stratification at the plume site).⁶²⁵ Thus, in recognition of its lack of regulations regarding thermal exhaust plumes, the low (but present) risk to flight operations that such plumes present, and the variety of factors that must be taken in to account to determine the presence, or severity, of any such risk, the FAA recommended that airports take such plumes in to account.⁶²⁶

197. Sierra Club asserts that the 2015 memorandum is “directed at airport sponsors to consider the impact of existing thermal plumes on potential future airports” and that it is inappropriate to expect the Southwest Oregon Regional Airport account for plumes from the new Jordan Cove LNG Terminal.⁶²⁷ To the contrary, the FAA states that the memorandum was prepared in response to several inquiries and requests “*from airport operators*”, and that the FAA-developed “Exhaust-Plume-Analyzer can be an effective tool to assess the impact exhaust plumes may impose on flight operations at an existing

⁶²¹ Final EIS at 4-657.

⁶²² FAA September 24, 2015 Memorandum at 1.

⁶²³ *Id.*

⁶²⁴ *Id.* at 2.

⁶²⁵ *Id.*

⁶²⁶ *Id.*

⁶²⁷ Sierra Club Rehearing Request at 52.

or proposed site in the vicinity of an airport.”⁶²⁸ Accordingly, it is entirely reasonable, based on the FAA’s 2015 memorandum, to expect the Southwest Oregon Regional Airport to take such plumes in to account. The Final EIS, informed by the FAA’s 2015 memorandum, determines that thermal exhaust plumes may have an adverse impact on takeoffs and landings, and reiterates the FAA’s directive for airports to take these plumes in to account.⁶²⁹ We find this analysis is sufficient, and encourage Jordan Cove to work with the Southwest Oregon Regional Airport as well as state and local authorities to address concerns regarding the potential impacts of thermal exhaust plumes on aircraft operations.

198. Sierra Club asserts that the Final EIS and Authorization Order fail to sufficiently assess the structural hazards to aviation caused by construction and operation of the Jordan Cove LNG Terminal,⁶³⁰ stating that the Final EIS and Authorization Order ignore the FAA determination “that [runway 04] will be unusable during instrument flight rule conditions when an LNG tanker is berthed or in transit.”⁶³¹ Sierra Club further disputes the Authorization Order’s determination that impacts to airport operations (including flight delays) would not be significant.⁶³² In support, Sierra Club cites the Final EIS’s conclusion that operation of the Jordan Cove LNG Terminal “could significantly impact” airport operations.⁶³³ As the Commission stated in the Authorization Order, the Final EIS’ determination that operating the Jordan Cove LNG Terminal could impact airport operations was based on the FAA’s determination that several components of the LNG terminal would be presumed hazards to air navigation.⁶³⁴ The Authorization Order further explains that, after the issuance of the Final EIS, the FAA completed aeronautical studies, which found that operation of the terminal or docked/transiting LNG tankers

⁶²⁸ FAA September 24, 2015 Memorandum at 2 (emphasis added).

⁶²⁹ Final EIS at 4-657.

⁶³⁰ Sierra Club Rehearing Request at 52-53.

⁶³¹ *Id.* (citing FAA’s December 23, 2019 “Determination of No Hazard to Air Navigation,” Aeronautical Study No. 2017-ANM-5386-OE).

⁶³² *Id.* at 52.

⁶³³ *Id.*

⁶³⁴ Authorization Order, 170 FERC ¶ 61,202 at P 244 (citing Final EIS at 4-657; Jordan Cove’s May 10, 2018 Response to Commission Staff’s April 20, 2018 Data Request).

would not cause a hazard to air navigation.⁶³⁵ The FAA’s determination provided a sufficient basis for the Commission to determine that airport operations would not be significantly impacted.

199. Sierra Club asserts that neither the Commission nor the FAA addressed the aviation hazards posed by “temporary” structures (i.e., cranes) that would be present during construction.⁶³⁶ The FAA’s “Determination of No Hazard to Air Navigation” for onshore equipment at the Jordan Cove LNG Terminal states that the determinations include temporary construction equipment, including cranes.⁶³⁷ Thus, the FAA took such construction equipment into account when issuing its determinations regarding hazards to air navigation.

200. Ms. McCaffree states that the Final EIS and the Authorization Order do not assess the hazards that would result from Jordan Cove’s proposal to dispose of dredged material “in very close proximity to the end” of a runway at the Southwest Oregon Regional Airport, as the location of the dredged material there may attract wildlife, which could create a hazard in the approach or departure airspace.⁶³⁸ Ms. McCaffree’s argument is dismissed as she raises this issue for the first time on rehearing. Ms. McCaffree had ample opportunity to present this argument during the Commission’s environmental review process. The Commission looks with disfavor on raising issues for the first time on rehearing that could have been raised earlier, particularly during the NEPA scoping process, in part, because other parties are not permitted to respond to requests for rehearing.⁶³⁹ Regardless, we note that the Final EIS assesses the potential for mitigation

⁶³⁵ *Id.* P 245.

⁶³⁶ Sierra Club Rehearing Request at 52-53.

⁶³⁷ Separate FAA determinations can be found at <http://oeaaa.faa.gov> for Aeronautical Study Nos: 2017-ANM-5386-OE through 2017-ANM-5388-OE; 2017-ANM-5390-OE through 2017-ANM-5418; 2018-ANM-4-OE through 2018-ANM-8-OE; 2018-ANM-718-OE through 2018-ANM-720-OE; 2019-ANM-5196-OE; and 2019-ANM-5197-OE.

⁶³⁸ McCaffree Rehearing Request at 22-23.

⁶³⁹ *See Baltimore Gas & Elec. Co.*, 91 FERC ¶ 61,270, at 61,922 (2000) (“We look with disfavor on parties raising on rehearing issues that should have been raised earlier. Such behavior is disruptive to the administrative process because it has the effect of moving the target for parties seeking a final administrative decision.”); *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 764 (2004) (“Persons challenging an agency’s compliance with NEPA must ‘structure their participation so that it ... alerts the agency to the [parties’] position and contentions,’ in order to allow the agency to give the issue meaningful consideration.”) (quoting *Vermont*, 435 U.S. at 553); *see also Tenn. Gas*

sites near the Southwest Oregon Regional Airport to attract birds to the area. The Final EIS determines that although dredge disposal may attract some birds, the disposal would not substantially alter the composition of wildlife or affect airport operations.⁶⁴⁰

201. Ms. McCaffree asserts that the “FAA did not sign off fully” on its determinations of presumed hazards for certain components of the Jordan Cove LNG Terminal and takes issue with the FAA’s eventual determinations of no hazard for these facilities. Ms. McCaffree further argues that it is arbitrary for the Commission to issue the Authorization Order while the applicant(s) complete surveys, studies, and/or consultations.⁶⁴¹ As an initial matter, if Ms. McCaffree contests the FAA’s no hazard determinations, she may register her complaints with the FAA; the Commission is not the appropriate venue for resolving the FAA’s determinations. Further, Ms. McCaffree does not allege that our reliance on the FAA’s determinations is improper, or otherwise undermines our determination regarding the Jordan Cove LNG Terminal’s safety impacts. Finally, while Ms. McCaffree does not identify the safety related studies, plans, or consultations that the Commission is allowing Jordan Cove to complete after issuance of the Authorization Order, as we explain above and in the Authorization Order, our practice of issuing conditional certificates has consistently been affirmed by courts as lawful.⁶⁴²

2. Safety Determination for Jordan Cove LNG Terminal

202. Ms. McCaffree asserts that the Commission inappropriately “delegated” its duty to consider the safety hazards of operating the Jordan Cove LNG Terminal, pursuant to the federal safety standards contained in Part 193, Subpart B, of Title 49 of the Code of Federal Regulations, and states that PHMSA’s September 11, 2019 Letter of Determination that the Jordan Cove LNG Terminal complies with these safety standards was erroneous.⁶⁴³ Ms. McCaffree further argues that the Commission is “precluded” from relying on PHMSA’s Letter of Determination, that the Final EIS fails to adequately respond to safety-related comments, and that the Commission’s issuance of a conditional

Pipeline Co., L.L.C., 162 FERC ¶ 61,167 at P 10; *Nw. Pipeline, LLC*, 157 FERC ¶ 61,093, at P 27 (2016) (“We dismiss the Cemetery’s argument that EA’s indirect impacts analysis was deficient because the Cemetery raises this argument for the first time on rehearing.”).

⁶⁴⁰ Final EIS at 4-196.

⁶⁴¹ McCaffree Rehearing Request at 23.

⁶⁴² *See supra* P 75.

⁶⁴³ McCaffree Rehearing Request at 18-21 (citing 49 C.F.R. pt. 93, subpt. B (2019)).

Authorization Order while Jordan Cove continues to demonstrate compliance with PHMSA's Letter of Determination and other safety-related matters is "arbitrary and not otherwise in accord with applicable law."⁶⁴⁴

203. Initially, Ms. McCaffree contends that the Commission is impermissibly "delegating" its duty under the NGA and NEPA to assess whether or not an LNG terminal complies with the federal safety standards.⁶⁴⁵ Ms. McCaffree asserts that doing so "usurps the NEPA process" by preventing public participation in the PHMSA proceeding, and seeks to "dissolve" Commission accountability for the safety determination.⁶⁴⁶ PHMSA is the federal agency named by Congress for "exercis[ing] authority under the Pipeline Safety Act (49 U.S.C. § 60101, et seq.) to prescribe safety standards for LNG facilities." Accordingly, we do not "delegate" our authority or duty to determine whether an LNG facility complies with these safety standards; rather, the responsibility and authority to make such a determination rests with PHMSA. As noted in the Authorization Order, pursuant to an August 31, 2018 Memorandum of Understanding entered into by PHMSA and the Commission (PHMSA MOU), on September 11, 2018, PHMSA issued a Letter of Determination indicating that the proposed Jordan Cove LNG Terminal complied with federal safety standards in Part 193, Subpart B of PHMSA's regulations.⁶⁴⁷

204. Ms. McCaffree contends that PHMSA's Letter of Determination is insufficient, in that it ignores the risks posed by "unconfined vapor cloud explosions", as well as comments regarding these risks.⁶⁴⁸ Ms. McCaffree asserts that Jordan Cove did not use appropriate modeling to demonstrate the risks of vapor cloud explosions and whether or not the hazard from such an explosion would remain within the boundaries of the LNG facility.⁶⁴⁹ Ms. McCaffree further argues that PHMSA failed to consider testimony and comments presented to PHMSA on this matter.⁶⁵⁰ As a result, Ms. McCaffree contends that the Commission is "precluded" from relying on PHMSA's Letter of Determination.

⁶⁴⁴ *Id.* at 18-21.

⁶⁴⁵ *Id.* at 18.

⁶⁴⁶ *Id.*

⁶⁴⁷ Authorization Order, 170 FERC ¶ 61,202 at P 41.

⁶⁴⁸ McCaffree Rehearing Request at 19-20.

⁶⁴⁹ *Id.*

⁶⁵⁰ *Id.*

205. As an initial matter, if Ms. McCaffree contests PHMSA's Letter of Determination she should raise her concerns with that agency, which is charged with prescribing such minimum safety standards and determining whether or not LNG facilities comply with those standards.⁶⁵¹ Both PHMSA's Letter of Determination and the Final EIS state that Jordan Cove must address the minimum safety standards requirements.⁶⁵² Regardless, the Commission finds that the Letter of Determination adequately assesses the potential hazards from vapor cloud explosions, as well as the potential for such explosions to extend beyond the boundary of the Jordan Cove LNG Terminal. The Letter of Determination acknowledges that, based on Jordan Cove's evaluation of hazardous releases (including vapor cloud explosions), these releases would extend "beyond the Jordan Cove LNG Terminal eastern boundary."⁶⁵³ To prevent such hazardous releases from extending beyond the boundary of the facility, the Letter of Determination states that Jordan Cove proposes to construct a 100-foot-high wall along the eastern boundary to serve as a "thermal radiation shield."⁶⁵⁴ PHMSA determined that such a measure would be appropriate, provided Jordan Cove can confirm the effectiveness of the wall, particularly to "withstand the overpressure impact due to a potential vapor cloud explosion scenario from the liquefaction area."⁶⁵⁵ Accordingly, it appears that PHMSA appropriately considered the risks of vapor cloud explosions in issuing its Letter of Determination, and the Commission relies on it "as the authoritative determination" of the Jordan Cove LNG Terminal's "ability to comply" with the minimum federal safety standards.⁶⁵⁶ Moreover, Ms. McCaffree's assertion that the Commission is somehow "precluded" from relying on PHMSA's Letter of Determination is without merit.

206. Ms. McCaffree asserts that the Final EIS violates NEPA by failing to "adequately" respond to comments on "the potential safety hazards of the Jordan Cove LNG terminal and its associated tanker traffic" and "thwarts" public review by allowing applicants to label information as "Critical Energy Infrastructure Information" (CEII).⁶⁵⁷ As discussed in detail above, PHMSA holds the responsibility to determine whether or not an LNG

⁶⁵¹ See, 49 U.S.C. § 60101, *et seq.* (2018); *see also* PHMSA MOU at 2.

⁶⁵² Final EIS at 4-741 to 4-742.

⁶⁵³ See Commission Staff's September 24, 2019 Memo filed in Docket No. CP17-495-000 (Containing PHMSA's Letter of Determination) at 3.

⁶⁵⁴ *Id.* at 21.

⁶⁵⁵ *Id.* at 3, 40.

⁶⁵⁶ PHMSA MOU at 2.

⁶⁵⁷ McCaffree Rehearing Request 25-28.

facility complies with federal safety standards;⁶⁵⁸ however, the Final EIS contains a detailed analysis of the Jordan Cove LNG Terminal's Reliability and Safety based on its process, mechanical, hazard mitigation, security, and geotechnical and structural designs, including how the facility would protect against vapor cloud explosions,⁶⁵⁹ and as discussed above, the Final EIS adequately considers tanker traffic impacts from construction and operation of the Jordan Cove LNG Terminal.⁶⁶⁰

207. Further, the Commission does not “thwart” public review and robust analysis of applications by allowing applicants to label information as CEII. The Commission began labeling certain information as CEII after the attacks of September 11, 2001; the Commission's CEII regulations seek to “restrict unfettered public access to [CEII], but still permit those with a need for the information to obtain it in an efficient manner.”⁶⁶¹ To prevent overutilization of the CEII designation, the Commission's regulations limit the labeling of CEII to “specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure.”⁶⁶² Moreover, the Commission's regulations permit any party to a proceeding to request and receive a complete CEII version of a document.⁶⁶³

208. Ms. McCaffree contends that the Authorization Order “failed to acknowledge” that PHMSA's Letter of Determination was (inappropriately) conditioned upon Jordan Cove demonstrating to PHMSA that its proposed hazardous release safety measures were effective, and that issuing the Authorization Order prior to Jordan Cove receiving all safety-related determinations was arbitrary.⁶⁶⁴ The Authorization Order recognizes that PHMSA conditioned its Letter of Determination on Jordan Cove finalizing its hazardous release mitigation; Environmental Condition 35 of the Authorization Order requires Jordan Cove to file documentation of PHMSA's determination that the final design safety

⁶⁵⁸ *See supra* P 205.

⁶⁵⁹ Final EIS at 4-759 to 4-769.

⁶⁶⁰ *See supra* PP 162-163.

⁶⁶¹ *See* Critical Energy Infrastructure Information, Order No. 683, 116 FERC ¶ 61,263, at PP 2, 6 (2006).

⁶⁶² 18 C.F.R. § 388.113(c)(1) (2019).

⁶⁶³ *Id.* § 388.113(g)(4) (2019).

⁶⁶⁴ McCaffree Rehearing Request at 21.

features comply with federal safety standards prior to initial site preparation.⁶⁶⁵ Further, as discussed above and in the Authorization Order, our practice of issuing conditional certifications and authorizations has consistently been affirmed as lawful.⁶⁶⁶

3. Forest Fires

209. Sierra Club argues that the Commission violated NEPA by failing to take a hard look at how pipeline construction and operation, including the temporary and permanent clearing of the right-of-way, will increase the likelihood and severity of forest fires.⁶⁶⁷ Sierra Club contends that the pipeline right-of-way will be permanently cleared of large diameter trees and replaced with early seral vegetation that in a wildfire may act like a wick and carry fire along the entire right-of-way, thus spreading fire beyond its “natural” reach.⁶⁶⁸

210. Contrary to Sierra Club’s assertion, the Final EIS acknowledges that both pipeline construction and operations could increase the risk of wildfires. Construction and operational activities—such as burning of cleared vegetation, mowing, welding, refueling with flammable liquids, vehicle and equipment use (parking vehicles with hot mufflers or tailpipes on tall dry grass)—could create a wildfire risk, especially during wildfire season.⁶⁶⁹ Although the cleared right-of-way may work as a fire break, the presence of the cleared right-of-way could also increase the risk of fires reaching forest crowns.⁶⁷⁰ As discussed in the Final EIS, large forest fires including crown fires could occur if small, low-intensity surface fires are ignited within the herbaceous or low shrub cover maintained along the permanent right-of-way. These fires could then spread to ladder fuels near forest edges and ignite the forest’s canopy.⁶⁷¹

211. In response to these risks, Pacific Connector will implement a *Fire Prevention and Suppression Plan*.⁶⁷² This plan is consistent with Forest Service and BLM policies and

⁶⁶⁵ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 35.

⁶⁶⁶ See *supra* P 75.

⁶⁶⁷ Sierra Club Rehearing Request at 53.

⁶⁶⁸ *Id.* at 54.

⁶⁶⁹ Authorization Order, 170 FERC ¶ 61,202 at P 211; Final EIS at 4-177 to 4-178.

⁶⁷⁰ Final EIS at 4-178.

⁶⁷¹ *Id.* at 4-177 to 4-178.

⁶⁷² *Id.* at 4-178, 4-816.

current practices and is designed to identify measures to minimize the chances of a fire starting and spreading from project facilities and to reduce the risk of wildland and structural fire. Although designed for federal lands, the plan would be applicable to the entire pipeline route; regardless of landownership. In addition, the *Erosion Control and Revegetation Plan* requires that residual slash from timber clearing be placed at the edge of the right-of-way and scattered/redistributed across the right-of-way during final cleanup and reclamation according to BLM and Forest Service fuel loading specifications to minimize fire hazard risks.⁶⁷³

212. Sierra Club argues that the Commission failed to assess whether fuel breaks (strips or blocks of vegetation that have been altered to slow or control a fire) along the pipeline right-of-way would be effective. Sierra Club acknowledges that fuel breaks can be effective so long as vegetation is maintained and eliminated, but the Commission appears to be letting this vegetation regrow. Sierra Club also points out that such fuel breaks are generally ineffective in the high to extreme fire behavior weather in Southern Oregon along the right-of-way.⁶⁷⁴ As discussed, a maintained right-of-way may function as a fire break in certain circumstances; however, contrary to Sierra Club's claim, the Commission is not requiring fuel breaks along the pipeline right-of-way.⁶⁷⁵ Therefore, the additional analysis requested by Sierra Club is not necessary.

213. Sierra Club claims that the pipeline may be susceptible to wildfire risks along the right-of-way due to the pipeline's shallow depth, noting that it is unclear whether the pipeline will be buried 18 or 24 inches below the surface.⁶⁷⁶ According to Sierra Club, should a rupture occur, a catastrophic wildfire would begin or if already ongoing, be exacerbated beyond control.⁶⁷⁷

⁶⁷³ *Id.* at Appendix F.10-Part 2, *Erosion Control and Revegetation Plan*, 10.

⁶⁷⁴ Sierra Club Rehearing Request at 55.

⁶⁷⁵ Although the Commission is not requiring fuel breaks along the pipeline right-of-way, integrated stand density fuel breaks, which are designed to reduce the threat of stand replacement fires by reducing stand density, ladder fuels, and incorporating existing openings, have been recommended by BLM and Forest Service as compensatory mitigation on BLM and Forest Service lands off of the pipeline right-of-way. We anticipate that BLM and Forest Service may tier to the EIS when preparing their subsequent site-specific NEPA analyses. Final EIS at 2-35 to 2-39.

⁶⁷⁶ *Id.*

⁶⁷⁷ *Id.*

214. As Sierra Club suggests, the depth of the pipeline trench varies. DOT regulations require a trench depth of 30 inches in normal soil, 18 inches in consolidated rock, and 48 to 60 inches in agricultural lands.⁶⁷⁸ Pacific Connector plans to exceed these minimums where feasible with the goal to trench to a depth of 36 inches in normal soils and up to 24 inches of cover in consolidated rock areas.⁶⁷⁹ Sierra Club offers no evidence to suggest that a wildfire is sufficient to overcome the insulating properties of soil or ignite the gas in the subterranean pipeline.

215. Sierra Club next argues that construction and operation of the pipeline will occur during the wildfire season when mechanized and industrial activities are precluded during most daylight hours from late spring to late fall, but the Authorization Order places no fire-related restrictions on the Pacific Connector Pipeline's operations when other activities are precluded.⁶⁸⁰ We do not see the need to restrict construction as Sierra Club requests due to Pacific Connector's use of its *Fire Prevention and Suppression Plan*.⁶⁸¹ As discussed, the plan will reduce the risk of fires associated with construction and operation of the pipeline and also includes fire response procedures to be implemented in the event of a fire.⁶⁸²

216. Sierra Club also expresses concern that the pipeline's presence will inhibit controlled burns, which help restore forest resilience in wildfire-prone areas, and instead the areas in the vicinity of the pipeline will be managed as "full suppression."⁶⁸³ However, Sierra Club does not present any evidence to suggest this may be the case. There is no evidence supporting the assertion that the presence of a right-of-way precludes controlled burns. We note that controlled burns may occur over existing rights-of-way with appropriate planning and consultation with pipeline operators. Furthermore, it is speculative to claim that a right-of-way would be managed as "full-suppression." The presence of a right-of-way may affect suppression efforts, but Sierra Club has offered no policy or regulation that a right-of-way prevents suppression or necessitates "full suppression."

⁶⁷⁸ 49 CFR pt. 192 (2019).

⁶⁷⁹ Pacific Connector Pipeline Resource Report 1 at 50.

⁶⁸⁰ *Id.* at 54-55.

⁶⁸¹ Final EIS at 4-178, 4-816.

⁶⁸² *Id.* at 4-178 to 4-179. Although we are not requiring seasonal restrictions, we note that Pacific Connector will only burn slash during the wet season. Final EIS at 4-446.

⁶⁸³ Sierra Club Rehearing Request at 55.

N. Threatened and Endangered Species

217. Sierra Club contends that the Commission violated the Endangered Species Act (ESA) by: (1) issuing a certificate requiring the Blue Ridge Alternative without consulting with the U.S. Fish and Wildlife Service (FWS) and NMFS (collectively, the Services) regarding that alternative, and (2) relying on Biological Opinions that the Commission had reason to know are flawed.⁶⁸⁴

218. Sierra Club claims that Commission staff's Biological Assessment and the Services' Biological Opinions analyzed and authorized the proposed route and not the Blue Ridge Alternative, which is what the Commission authorized in the Authorization Order.⁶⁸⁵ Sierra Club argues that the Blue Ridge Alternative has effects that are "different in scope, scale, and location" than what the Services considered.⁶⁸⁶ Accordingly, Sierra Club argues that the ESA requires the Commission to reinitiate consultation with the Services.⁶⁸⁷

219. Commission staff's Biological Assessment states:

[t]his [Biological Assessment] assesses the [projects] as designed and proposed by the applicant; however, the FERC and the Forest Service have recommended that four route variation be included in the proposed action . . . including . . . the Blue Ridge Variation Appendix R provides the quantitative differences to listed species that these variations would have compared to the proposed action. As presented in Appendix R, we have concluded that inclusion of these variations into the proposed action would not change the effects determinations presented in this [Biological Assessment].⁶⁸⁸

220. Thus, Commission staff's Biological Assessment did analyze the Blue Ridge Variation, and staff found the Blue Ridge Variation and the proposed route result in the

⁶⁸⁴ *Id.* at 29-30, 56-64.

⁶⁸⁵ *Id.* at 29.

⁶⁸⁶ *Id.* (citing Authorization Order, 170 FERC ¶ 61,202 at P 270).

⁶⁸⁷ *Id.* at 30.

⁶⁸⁸ Commission staff's July 2019 Biological Assessment at 3-4 (filed on July 30, 2019).

same effects determinations. Moreover, staff's Biological Assessment expressly stated that the Commission and the Forest Service recommend inclusion of the Blue Ridge Alternative in the proposed action.

221. We acknowledge, however, that although the Biological Opinions state they are based on information included in the Biological Assessment, the Biological Opinions do not explicitly reference the Blue Ridge Alternative. Therefore, we will informally consult with the Services to determine whether the ESA requires any further consultation. If further consultation is required, the Commission will not authorize the applicants to commence construction activities until such consultation is complete, pursuant to Environmental Condition 11.⁶⁸⁹

222. Sierra Club also argues that the Commission violated the ESA by relying on Biological Opinions that the Commission had reason to know are flawed.⁶⁹⁰ Generally, Sierra Club contends that the Biological Opinions fail to adequately assess harm to species and that the reinitiation triggers are coextensive with project effects.⁶⁹¹ Specific to FWS's Biological Opinion, Sierra Club argues that FWS' Biological Opinion: (1) failed to adequately explain inconsistencies between the opinion and FWS' recovery plans for the marbled murrelet and northern spotted owl and (2) relied on uncertain mitigation measures.⁶⁹² Specific to NMFS's Biological Opinion, Sierra Club claims that NMFS' Biological Opinion: (1) failed to explain its use of surrogates as reinitiation triggers for several species, (2) did not use the best available science, (3) failed to adequately address cumulative effects associated with the projects, and (4) failed to provide incidental take coverage for vessel strikes to whales.⁶⁹³

223. Sierra Club discounts the substantive and procedural responsibilities that section 7(a)(2) of the ESA⁶⁹⁴ imposes and the interdependence of federal agencies acting under that section. Although a federal agency is required to ensure that its action will not jeopardize the continued existence of listed species or adversely modify their critical habitat, it must do so in consultation with the Services. Because the Services are charged

⁶⁸⁹ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 11.

⁶⁹⁰ Sierra Club Rehearing Request at 56-64.

⁶⁹¹ *Id.*

⁶⁹² *Id.* at 56-58.

⁶⁹³ *Id.* at 58-64.

⁶⁹⁴ 6 U.S.C. § 1536(a)(2) (2018).

with implementing the ESA, they are the recognized experts regarding matters of listed species and their habitats, and the Commission may rely on their conclusions.⁶⁹⁵

224. In reviewing whether the Commission may appropriately rely on the Services' Biological Opinions, the relevant inquiry is not whether the documents are flawed, but rather whether the Commission's reliance was arbitrary and capricious.⁶⁹⁶ An agency may rely on a Biological Opinion if a challenging party fails to cite new information that the consulting agency did not take into account that challenges the Biological Opinion's conclusions.⁶⁹⁷ Here, Sierra Club does not present any new information that the Services did not consider, and, accordingly, the alleged defects do not rise to the level of new information that would cause the Commission to call into question the factual conclusions of the Biological Opinions. We find the Commission appropriately relied on the judgment of the Services—the agencies responsible for providing expert opinion regarding whether authorizing the projects is likely to jeopardize the continued existence of listed species under the ESA. Thus, we reject Sierra Club's argument that our reliance on the Services' Biological Opinions violated the ESA.

225. We note that the cumulative effects that Sierra Club claims NMFS failed to address in its Biological Opinion (specifically, that the projects will likely result in the development of another LNG terminal and additional pipelines in the area and will likely spur additional industrial development in Coos Bay)⁶⁹⁸ are not cumulative effects that must be considered in consultation because they are purely speculative and not reasonably certain to occur.⁶⁹⁹

226. Additionally, regarding take associated with vessel strikes to whales, NMFS explained in its Biological Opinion that “the ESA does not allow NMFS to exempt incidental take of marine mammals where an authorization of the take is required and may be obtained under the [Marine Mammal Protection Act (MMPA).]”⁷⁰⁰ As noted in

⁶⁹⁵ *City of Tacoma v. FERC*, 460 F.3d 53, 75 (D.C. Cir. 2006) (finding that expert agencies such as FWS have greater knowledge about the conditions that may threaten listed species and are best able to make factual determinations about appropriate measures to protect the species).

⁶⁹⁶ *Id.*

⁶⁹⁷ *Id.* at 76.

⁶⁹⁸ *Id.* at 62-63.

⁶⁹⁹ 50 C.F.R. § 402.02 (2019).

⁷⁰⁰ NMFS January 10, 2020 Biological Opinion at 53.

the Authorization Order, Jordan Cove's consultation with NMFS regarding impacts on marine mammals is ongoing, and NMFS may issue an incidental take authorization under the MMPA.⁷⁰¹

227. Ms. McCaffree argues that the Commission violated the ESA because it did not fully assess the projects' impacts, specifically dredging and noise, to snowy plovers and their habitats.⁷⁰² Ms. McCaffree claims that the Commission failed to consider "[p]ictures and proof of plovers utilizing the tidal muds that are slated to be destroyed by the development of the LNG marine terminal...."⁷⁰³

228. FWS's Biological Opinion analyzed impacts to western snowy plovers, including impacts from dredging and noise.⁷⁰⁴ FWS determined that the projects would not jeopardize the continued existence of the species or result in the destruction or adverse modification of its critical habitat;⁷⁰⁵ and, in its Incidental Take Statement for western snowy plover, FWS provided four reasonable and prudent measures and nine terms and conditions.⁷⁰⁶ The Authorization Order requires Jordan Cove and Pacific Connector to implement the reasonable and prudent measures and adopt the terms and conditions in FWS' Biological Opinion.⁷⁰⁷ Accordingly, we find that the Commission satisfied its obligations under the ESA by ensuring that the Commission's action will not jeopardize the continued existence of the western snowy plover or result in the destruction or adverse modification of its habitat.

O. Air Quality

229. The State of Oregon asserts that the Final EIS erroneously claims that the Jordan Cove LNG Terminal and the Pacific Connector Pipeline are not subject to Prevention of Significant Deterioration preconstruction permit requirements under the Clean Air Act because the Jordan Cove LNG Terminal does not exceed relevant PSD requirements.⁷⁰⁸

⁷⁰¹ Authorization Order, 170 FERC ¶ 61,202 at P 226.

⁷⁰² McCaffree Rehearing Request at 28-29.

⁷⁰³ *Id.* at 29.

⁷⁰⁴ FWS January 31, 2020 Revised Biological Opinion at 172-207.

⁷⁰⁵ *Id.* at 197.

⁷⁰⁶ *Id.* at 203-207.

⁷⁰⁷ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 26.

⁷⁰⁸ State of Oregon Rehearing Request at 33.

The State of Oregon indicates that the Jordan Cove LNG Terminal is projected to emit more than two times the Prevention of Significant Deterioration thresholds carbon monoxide and oxides of nitrogen (NOx) for new federal sources, and, if Oregon Department of Environmental Quality (DEQ) determines that the facilities qualify as a major new stationary source, they will be subject to additional control requirements, including Best Available Control Technology to control GHG emissions, which could change the terminal's design and operations.⁷⁰⁹ The State of Oregon also argues that Jordan Cove and Pacific Connector have indicated uncertainty about the exact nature of the liquefaction facilities at the terminal and the Klamath Compressor Station,⁷¹⁰ which has prevented DEQ from making a Prevention of Significant Deterioration determination.⁷¹¹

230. Under the Prevention of Significant Deterioration program, a listed new "federal major source" that exceeds 100 tons per year or more of any individual regulated pollutant is subject to preconstruction permit requirements, while a non-listed source is subject to these requirements if it has the potential to emit less than the 250 tons per year (tpy) or more of any criteria pollutant.⁷¹² To provide context for project emissions, the Authorization Order and Final EIS state that the terminal must obtain preconstruction review and a permit under Title V of the CAA, but was not subject to Prevention of Significant Deterioration because the terminal is not a listed federal major source and its potential to emit is less than 250 tpy during operations,⁷¹³ and made the same determination for the Klamath Compressor Station.⁷¹⁴ However, the State of Oregon retains full authority to grant or deny air quality permits; if the State of Oregon requires that the Jordan Cove LNG Terminal must obtain a Prevention of Significant Deterioration permit, it will be up to Jordan Cove to determine how it wishes to proceed. In addition, the Commission has conditioned our authorization on Jordan Cove's ability to secure all

⁷⁰⁹ *Id.* at 33, 70-71.

⁷¹⁰ The State of Oregon refers to the Klamath Compressor Station near Malin, Oregon, as the Malin Compressor Station. State of Oregon Rehearing Request at 70-71.

⁷¹¹ *Id.* at 70-71.

⁷¹² *Id.* at 33 (citing OAR 340-200-0020(66)(c)).

⁷¹³ Authorization Order, 170 FERC ¶ 61,202 at P 255; EIS at 4-701 to 4-702.

⁷¹⁴ Authorization Order, 170 FERC ¶ 61,202 at P 255; EIS at 4-706.

necessary federal authorizations, including any relevant federal CAA permits obtainable from Oregon DEQ.⁷¹⁵

231. Finally, Ms. McCaffree argues that the Commission failed to adequately consider tanker emissions as part of the cumulative impacts analysis for air quality.⁷¹⁶ We disagree. The Final EIS fully considers and modeled LNG carrier emissions when assessing the Jordan Cove LNG Terminal's operational air emissions,⁷¹⁷ concluding that the project would not have a significant impact on regional air quality.⁷¹⁸

P. Climate Change and GHG Emissions

1. Global Warming Potentials

232. NRDC contends that the Commission failed to adequately consider the projects' GHG impacts, alleging that the Commission relied on outdated global warming potentials (GWP) for GHGs when it used the EPA's international GHG reporting rules rather than the Intergovernmental Panel on Climate Change's (IPCC) more recent estimates to analyze the projects' GHG emissions.⁷¹⁹ For methane, NRDC contends that even if the Commission uses EPA's GWP of 25 over a 100-year period, the Commission must also calculate climate impacts using the IPCC's more recent 100-year GWP of 36 and 20-year GWP of 84-87 due to methane's potency over a shorter timeframe and to better correspond to 20- to 30-year natural gas transportation contracts.⁷²⁰

233. The Commission appropriately relied on EPA's published global warming potentials, which are the current scientific methodology used for consistency and comparability with other Commission jurisdictional projects as well as emissions estimates in the United States and internationally, including GHG control programs under

⁷¹⁵ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 11.

⁷¹⁶ McCaffree Rehearing Request at 32.

⁷¹⁷ Final EIS at 4-701.

⁷¹⁸ *Id.* at 4-707.

⁷¹⁹ NRDC Rehearing Request at 67.

⁷²⁰ *Id.* at 67-68.

the CAA.⁷²¹ As we have explained,⁷²² we have consistently used EPA’s global warming potentials, including time horizons, in order to compare proposals with other projects and with GHG inventories.

2. Indirect, Cumulative, and Connected Greenhouse Gas Emissions

234. NRDC, Sierra Club, and Confederated Tribes contend that the Commission failed to consider the indirect and cumulative impacts associated with the Pacific Connector Pipeline and Jordan Cove LNG Terminal, arguing that the Commission must include the induced upstream production of gas, impacts associated with transport and liquefaction, and downstream consumption of the gas that flows through the pipeline.⁷²³ On upstream emissions, both Sierra Club and NRDC argue that the Commission must consider GHG emissions at the wellhead when the Commission relies, in part, on the pipeline’s ability to supply natural gas from supply basins in the U.S. Rocky Mountains and Western Canada as a project benefit.⁷²⁴ NRDC contends, at the very least, the Commission should be able to calculate upstream emissions using the full capacity of the pipeline.⁷²⁵ Confederated Tribes argues that the Commission must consider the eventual end use of the natural gas being transported through the Jordan Cove LNG Terminal.⁷²⁶ Confederated Tribes points out that the downstream combustion of the gas transported by the terminal is not just a “reasonably foreseeable” indirect impact, it is the terminal’s entire purpose.⁷²⁷

235. NEPA requires agencies to consider indirect impacts that are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”⁷²⁸

⁷²¹ Authorization Order, 170 FERC ¶ 61,202 at PP 258-59; Final EIS at 4-687 to 4-694, tbls. 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1, & 4.12.1.4-2.

⁷²² *Dominion Transmission, Inc.*, 158 FERC ¶ 61,029, at P 4 (2017).

⁷²³ NRDC Rehearing Request at 58-59, 60-61; Sierra Club Rehearing Request at 67; Confederated Tribes Rehearing Request at 34.

⁷²⁴ NRDC Rehearing Request at 69; Sierra Club Rehearing Request at 67-68.

⁷²⁵ NRDC Rehearing Request at 70.

⁷²⁶ Confederated Tribes Rehearing Request at 36.

⁷²⁷ *Id.*

⁷²⁸ 40 C.F.R. § 1508.8 (2019).

236. As discussed in the Authorization Order, upstream greenhouse gases associated with the gas transported on the Pacific Connector Pipeline are not an indirect impact for purposes of NEPA.⁷²⁹ We are unable to identify, based on the record, an incremental increase in natural gas production that is causally related to our action in approving the projects.⁷³⁰ Although the Commission noted generally the natural gas production areas that will provide natural gas to be transported via the Pacific Connector Pipeline,⁷³¹ given the large geographic scope of Western Canada and the U.S. Rocky Mountain production areas, the magnitude of analysis requested would require the Commission to go well beyond “reasonable forecasting.” Furthermore, the Commission does not have more detailed information regarding the number, location, and timing of wells, roads, gathering lines, and other appurtenant facilities, nor does it have details about production methods. Thus, there are no available forecasts that would enable the Commission to meaningfully predict production-related impacts, many of which are highly localized. Any estimates of the potential impacts associated with induced unconventional natural gas production arguably related to the Pacific Connector Pipeline would be based on information that is generic in nature, providing upper-bound estimates of upstream effects using general shale gas well information and worst-case scenarios of peak use. The Commission does not find this type of generic estimate to meaningfully inform its decision. Consequently, we continue to find that impacts from upstream production activities do not meet the definition of indirect effects, and therefore they are not mandated to be included in the Commission’s NEPA review.⁷³²

237. NRDC and the Confederated Tribes argue that the Commission must nonetheless examine the full lifecycle climate impacts associated with both projects, including the downstream impacts related to consumption of the gas to be exported from the terminal, because the Pacific Connector Pipeline and Jordan Cove LNG Terminal are a single integrated project.⁷³³ As we explained in the Authorization Order, the courts have explained that, because the authority to authorize the LNG exports rests with DOE; NEPA does not require the Commission to consider the upstream or downstream GHG emissions that may be indirect effects of the export itself when determining whether the

⁷²⁹ Authorization Order, 170 FERC ¶ 61,202 at P 174.

⁷³⁰ *Id.*

⁷³¹ *Id.* P 47.

⁷³² *See generally id.* (McNamee, Comm’r, concurrence at PP 22-58) (elaborating on the purpose of the NGA to facilitate the development and access to natural gas, as well as an analysis of consideration of indirect effects under NEPA).

⁷³³ NRDC Rehearing Request at 59; Confederated Tribes Rehearing Request at 36.

related LNG export facility satisfies section 3 of the NGA.⁷³⁴ These courts agree that the Commission is not the legally relevant cause of these emissions.⁷³⁵

238. Sierra Club and NRDC next claim that the Commission must analyze downstream impacts from the terminal because DOE's non-free trade export review is a connected action.⁷³⁶ Pursuant to CEQ regulations, "connected actions" include actions that: (a) automatically trigger other actions, which may require an EIS; (b) cannot or will not proceed without previous or simultaneous actions; or (c) are interdependent parts of a larger action and depend on the larger action for their justification.⁷³⁷ As noted above,⁷³⁸ in evaluating whether multiple actions are, in fact, connected actions, courts have employed a "substantial independent utility" test, asks "whether one project will serve a significant purpose even if a second related project is not built."⁷³⁹

239. As required by NGA section 3(c),⁷⁴⁰ DOE issued an instant grant of authority to Jordan Cove to export 395 Bcf per year of natural gas to countries with which the United States has an FTA, and this volume is equivalent to Jordan Cove LNG Terminal's nameplate capacity of 7.8 MTPA of LNG.⁷⁴¹ No additional trade authorization is needed for the terminal to operate at its full capacity. Because the terminal already has a significant purpose and could proceed absent the pending authorization for non-FTA nations, the two actions are not connected actions.

⁷³⁴ Authorization Order, 170 FERC ¶ 61,202 at P 171 (citing *Sierra Club v. FERC*, 827 F.3d 36 (D.C. Cir. 2016) (Freeport)); *see also Sierra Club v. FERC*, 867 F.3d at 1373 (discussing Freeport).

⁷³⁵ *See* Freeport, 827 F.3d at 46-47; *Sierra Club v. FERC*, 867 F.3d at 1373.

⁷³⁶ Sierra Club Rehearing Request at 68-70; NRDC Rehearing Request at 59.

⁷³⁷ 40 C.F.R. § 1508.25(a)(1) (2019).

⁷³⁸ *See supra* P 122.

⁷³⁹ *Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d at 69. *See also O'Reilly v. U.S. Army Corps of Eng'rs*, 477 F.3d at 237 (defining independent utility as whether one project "can stand alone without requiring construction of the other [projects] either in terms of the facilities required or of profitability").

⁷⁴⁰ 15 U.S.C. § 717b(c) (2018).

⁷⁴¹ Authorization Order, 170 FERC ¶ 61,202 at P 181.

240. Nonetheless, Sierra Club contends that even if the Jordan Cove LNG Terminal does not depend on non-FTA nation authorization, the two actions are connected because the non-FTA nation exports authorization does not have independent utility absent the terminal.⁷⁴² But under CEQ's definition of a connected action, the terminal must have an interdependent relationship with the non-FTA nation authorization.⁷⁴³ Nothing about the Jordan Cove LNG Terminal "triggers" or mandates non-FTA nation authorization and, as discussed, the terminal can proceed without such authorization. Moreover, Sierra Club does not make any showing that the delivery of natural gas to non-FTA nations, as opposed to FTA nations, has differing environmental effects, nor is there any information available as to the end use of the gas to be shipped from the Jordan Cove LNG Terminal.

3. Project Level Climate Impacts

241. Ms. McCaffree claims that the Commission failed to consider and address the projects' GHG impacts on commerce and Gross Domestic Product, as well as impacts of ocean acidification, domoic acid and sea level rise on the biological function of the Coos Estuary.⁷⁴⁴ As discussed in the Final EIS and below, the Commission examined various tools to link project GHGs to climate change impacts, but was unable to identify a method for relating GHG emissions to specific resource impacts.⁷⁴⁵ However, the EIS identified general climate change impacts in the project area.⁷⁴⁶ Currently, there is no accepted methodology to attribute discrete, quantifiable, physical effects on the environment, particularly Coos Bay, or the area's economy to the projects' incremental contribution to GHGs.⁷⁴⁷

⁷⁴² Sierra Club Rehearing Request at 68.

⁷⁴³ 40 C.F.R. § 1508.25(a)(1) (2019). *See also Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014) (finding that four pipeline proposals were connected actions because the four projects would result in "a single pipeline" that was "linear and physically interdependent" and because the projects were financially interdependent).

⁷⁴⁴ McCaffree Rehearing Request at 32-33.

⁷⁴⁵ Final EIS at 4-849.

⁷⁴⁶ *Id.*

⁷⁴⁷ *See generally* Authorization Order, 170 FERC ¶ 61,202 at P 262.

4. Significance

242. The State of Oregon, NRDC, and Sierra Club argue that the Commission is required by both NEPA and the NGA to assess the significance of the projects' GHG emissions, even if the Commission must develop its own methodology for assessing GHG emissions.⁷⁴⁸ NRDC and Sierra Club suggest that the Commission use existing climate models to develop such a methodology.⁷⁴⁹ NRDC claims the Commission failed to explain why existing climate models were too large and complex to assess significance, or why more simplistic climate models were not appropriate.⁷⁵⁰ Sierra Club also claims that other methodologies could be used to ascribe significance, including tools used by the U.S. Global Change Research Program (USGCRP) to assess impacts.⁷⁵¹

243. As an initial matter, the Commission discussed the significance of the projects' direct GHG emissions by quantifying those emissions,⁷⁵² and those emissions were placed in the context of cumulative emissions from other sources.⁷⁵³ NEPA requires nothing more.

244. We disagree that the Commission can establish its own methodology for determining the significance of GHG emissions as we do for other resources, such as wetlands or vegetation. The Commission applies standard methodologies and established metrics for assessing the significance of the environmental impacts on these resources. In contrast, here the Commission has no benchmark to determine whether a project has a significant effect on climate change. To assess a project's effect on climate change, the Commission can only quantify the amount of project emissions, but it has no way to then assess how that amount contributes to climate change. For example, that calculated

⁷⁴⁸ State of Oregon Rehearing Request at 35-36, 61-62, 67; NRDC Rehearing Request at 61-64; Sierra Club Rehearing Request at 65-67.

⁷⁴⁹ NRDC Rehearing Request at 63-64; Sierra Club Rehearing Request at 66.

⁷⁵⁰ NRDC Rehearing Request at 63-64.

⁷⁵¹ *Id.* at 66.

⁷⁵² Final EIS at tbl.4.12.1.3-1 (LNG Terminal construction emissions), Table 4.12.1.3-2 (LNG Terminal operation emissions), tbl.4.12.1.4-1 (pipeline facilities construction emissions), & tbl.4.12.1.4-2 (pipeline facilities operation emissions); Authorization Order, 170 FERC ¶ 61,202 at PP 258-59.

⁷⁵³ Authorization Order, 170 FERC ¶ 61,202 at P 259. Commission staff also put the projects' GHG emissions into context by calculating their contribution to Oregon's 2020 and 2050 climate goals. Final EIS at 4-851.

number cannot inform the Commission on climate change effects caused by the project, e.g., increase of sea level rise, effect on weather patterns, or effect on ocean acidification. Without adequate support or a reasoned target, the Commission cannot ascribe significance to GHG emissions amounts.⁷⁵⁴

245. As for the climate models and mathematical techniques raised by NRDC and Sierra Club, these climate models are used by the USGCRP and, as explained in the Final EIS, include climate models used by the EPA, National Aeronautics and Space Administration, and the IPCC.⁷⁵⁵ Commission staff determined that those complex national and global models could not be used to directly link the projects' incremental contribution to climate change to effects on the environment.⁷⁵⁶ As we explained in the Final EIS, Commission staff looked at a number of simpler models and attempted to extrapolate impacts using mathematical techniques, but none allowed the Commission to link physical effects caused by the projects' GHG emissions and NRDC does not suggest any such model exists.⁷⁵⁷

246. In the alternative, NRDC claims the Commission has other tools at its disposal to assess the significance of GHG, including the Social Cost of Greenhouse Gases.⁷⁵⁸ NRDC argues that the Social Cost of Greenhouse Gases contextualizes costs associated with climate change and can also be used as a proxy for understanding climate impacts and to compare alternatives.⁷⁵⁹

247. The Social Cost of Carbon is not a suitable method for determining whether GHG emissions that are caused by a proposed project will have a significant effect on climate change. The Commission has provided extensive discussion on why the Social Cost of Carbon is not appropriate in project-level NEPA review and cannot meaningfully inform

⁷⁵⁴ See generally Authorization Order, 170 FERC ¶ 61,202 (McNamee, Comm'r, concurring at PP 73-80) (elaborating on how it would be unreasonable for the Commission to establish its own criteria for determining significance out of whole cloth).

⁷⁵⁵ Final EIS at 4-850.

⁷⁵⁶ *Id.*

⁷⁵⁷ *Id.*

⁷⁵⁸ NRDC Rehearing Request at 64-65 (NRDC describes the Social Cost of Greenhouse Gases as comprising the Social Cost of Carbon, the Social Cost of Methane, and the Social Cost of Nitrous Oxide).

⁷⁵⁹ *Id.*

the Commission's decisions on natural gas infrastructure projects under the NGA.⁷⁶⁰ It is not appropriate for use in any project-level NEPA review for the following reasons:

- (1) EPA states that “no consensus exists on the appropriate [discount] rate to use for analyses spanning multiple generations”⁷⁶¹ and consequently, significant variation in output can result;⁷⁶²
- (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 NEPA reviews.⁷⁶³

⁷⁶⁰ *Mountain Valley*, 161 FERC ¶ 61,043 at P 296, *order on reh'g*, 163 FERC ¶ 61,197 at PP 275-297, *aff'd*, *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199 at *2 (“[The Commission] gave several reasons why it believed petitioners’ preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.”); *see also EarthReports, Inc. v. FERC*, 828 F.3d 949, 956 (D.C. Cir. 2016); *Sierra Club v. FERC*, 672 F. App’x 38, (D.C. Cir. 2016); *350 Montana v. Bernhardt*, No. CV 19-12-M-DWM, 2020 WL 1139674, *6 (D. Mont. March 9, 2020) (upholding the agency’s decision to not use the Social Cost of Carbon because it is too uncertain and indeterminate to be useful); *Citizens for a Healthy Cmty. v. U.S. Bureau of Land Mgmt.*, 377 F. Supp. 3d 1223, 1239-41 (D. Colo. 2019) (upholding the agency’s decision to not use the Social Cost of Carbon); *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 77-79 (D.D.C. 2019) (upholding the agency’s decision to not use the Social Cost of Carbon).

⁷⁶¹ *See* Fact Sheet: *Social Cost of Carbon* issued by EPA in November 2013, https://19january2017snapshot.epa.gov/climatechange/social-cost-carbon_.html.

⁷⁶² Depending on the selected discount rate, the tool can project widely different present-day cost to avoid future climate change impacts. *See generally* Authorization Order, 170 FERC ¶ 61,202 (McNamee, Comm’r, concurring at n.147) (“The Social Cost of Carbon produces wide-ranging dollar values based upon a chose discount rate, and the assumptions made. The Interagency Working Group on Social Cost of Greenhouse Gases estimated in 2016 that the Social Cost of one ton of carbon dioxide for the year 2020 ranged from \$12 to \$123.”).

⁷⁶³ *See generally* Authorization Order, 170 FERC ¶ 61,202 (McNamee, Comm’r, concurring at P 72) (“When the Social Cost of Carbon estimates that one metric ton of

We have also repeatedly explained that while the methodology may be useful for other agencies' rulemakings or comparing regulatory alternatives using cost-benefit analyses where the same discount rate is consistently applied, it is not appropriate for estimating a specific project's impacts or informing our analysis under NEPA.⁷⁶⁴

248. NRDC also contends that the Commission could apply the projects' emissions to the remaining global carbon budget as outlined in the IPCC's Special Report.⁷⁶⁵ We disagree. This approach would obscure the projects' impacts by comparing project emissions to global emissions, and, consequently would compare project emissions at too broad a scale to be useful.

249. Sierra Club argues that there are GHG emission reduction goals that the Commission could use to assess significance.⁷⁶⁶ Sierra Club points to, the United States' adoption of a GHG emission reduction goal as part of the Paris climate accords, and states that although the Paris accords are "pending withdrawal," they are still effective.⁷⁶⁷

250. We do not see the utility in using the targets in the Paris climate accords, because the United States had announced its intent to withdraw from the accord.⁷⁶⁸ But, even if the Commission were to consider those targets, without additional guidance, the Commission cannot determine the significance of the projects' emissions in relations to

CO₂ costs \$12 (the 2020 cost for a discount rate of five percent), agency decision-makers and the public have no objective basis or benchmark to determine whether the cost is significant. Bare numbers standing alone simply *cannot* ascribe significance.") (emphasis in original) (footnote omitted).

⁷⁶⁴ *Mountain Valley*, 161 FERC ¶ 61,043 at P 296. Moreover, Executive Order 13783, Promoting Energy Independence and Economic Growth, has disbanded the Interagency Working Group on Social Cost of Greenhouse Gases and directed the withdrawal of all technical support documents and instructions regarding the methodology, stating that the documents are "no longer representative of governmental policy." Exec. Order No. 13,783, 82 Fed. Reg. 16093 (2017).

⁷⁶⁵ NRDC Rehearing Request at 65.

⁷⁶⁶ Sierra Club Rehearing Request at 65.

⁷⁶⁷ *Id.*

⁷⁶⁸ *See* Authorization Order, 170 FERC ¶ 61,202 at n.556. On November 4, 2019, President Trump began the formal process of withdrawing from the Paris Climate Accord by notifying the United Nations Secretary General of his intent to withdraw the United States from the Paris Climate Accord, which takes 12 months to take effect.

the goals. For example, there are no industry sector or regional emission targets or budgets with which to compare project emissions, or established GHG offsets to assess the projects' relationship with emissions targets.

251. Finally, NRDC, Sierra Club, and the State of Oregon, also contend that the Commission should have considered Oregon's climate reduction targets to assess significance.⁷⁶⁹ NRDC points out that the terminal's emissions would account for 4.2% and 15.3% of Oregon's 2020 and 2050 targets, respectively—meaning that the terminal would account for almost an eighth of the total state-wide emissions permissible under Oregon law in 2050.⁷⁷⁰ The State of Oregon points out that even if there is a lack of authority to meet the GHG emissions goals, the Commission could still use these benchmarks to assess significance.⁷⁷¹ Moreover, Governor Brown of Oregon recently issued an executive order to use existing authority to achieve Oregon's climate reduction goals.⁷⁷²

252. We explained in the Authorization Order that while the State of Oregon established a state policy to meet GHG emissions reduction goals, it did not create any additional regulatory authority to meet its goals.⁷⁷³ Governor Brown's executive order does not change our determination that Oregon's climate goals on their own cannot be used to ascribe significance. The order directed state agencies and commissions to exercise any and all authority and discretion to help facilitate Oregon's GHG emissions reduction goals.⁷⁷⁴ As we determined when considering the Paris climate accords,

⁷⁶⁹ NRDC Rehearing Request at 65-66; Sierra Club Rehearing Request at 65; State of Oregon Rehearing Request at 36.

⁷⁷⁰ NRDC Rehearing Request at 66.

⁷⁷¹ State of Oregon Rehearing Request at 36.

⁷⁷² Sierra Club Rehearing Request at 65-66 (citing Office of the Governor, State of Oregon, Executive Order No. 20-04, DIRECTING STATE AGENCIES TO TAKE ACTIONS TO REDUCE AND REGULATE GREENHOUSE GAS EMISSIONS (March 10, 2020), https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf).

⁷⁷³ Authorization Order 170 FERC ¶ 61,202 at P 260 (citing Or. Rev. Stat. § 468A.205 (2007)).

⁷⁷⁴ Office of the Governor, State of Oregon, Executive Order No. 20-04, DIRECTING STATE AGENCIES TO TAKE ACTIONS TO REDUCE AND REGULATE GREENHOUSE GAS EMISSIONS (March 10, 2020), https://www.oregon.gov/gov/Documents/executive_orders/eo_20-04.pdf.

without industry sector or regional emission targets or budgets with which to compare project emissions, or established GHG offsets to assess the projects' relationship with emissions targets, we cannot assess significance based on Oregon's climate reduction goals alone.

5. Mitigation

253. The State of Oregon and NRDC argue that the Commission could have used its authority to condition the Authorization Order with mitigation measures to address the GHGs that will be emitted by the projects.⁷⁷⁵ NRDC suggests that the Commission require Pacific Connector and Jordan Cove to mitigate the projects' GHGs by planting trees to sequester the projects' GHG emissions, or purchase renewable energy credits equal to the projects' electricity consumption.⁷⁷⁶

254. We do not believe there are any additional mitigation measures the Commission could impose with respect to the GHG emissions analyzed in the Final EIS. As discussed, the Commission is unable to reach a significance determination for these emissions because of the global nature of climate change; therefore, we see no way to establish appropriate levels of potential mitigation or no way to ensure project-level mitigation measures would be effective.⁷⁷⁷

6. The Commission's Public Interest Determinations under Sections 3 and 7 of the Natural Gas Act

255. Finally, Sierra Club, Ms. McCaffree, and the State of Oregon contend that the Commission's conclusion that it cannot evaluate the significance or severity of GHG emissions undermines FERC's conclusion that overall environmental impacts are, with few specific exceptions, insignificant, and prevents the Commission from properly making the NGA public interest determination.⁷⁷⁸ Sierra Club claims that the D.C. Circuit ruled in *Sabal Trail* that the Commission must consider, and therefore decide,

⁷⁷⁵ State of Oregon Rehearing Request at 63; NRDC Rehearing Request at 71-72.

⁷⁷⁶ *Id.* at 75.

⁷⁷⁷ See generally Authorization Order, 170 FERC ¶ 61,202 (McNamee, Comm'r, Concurrence at 59-68) (stating it would be inappropriate for the Commission to require mitigation of GHG emissions when "[o]ver the last 15 years, Congress has introduced and failed to pass 70 legislative bills to reduce GHG emissions").

⁷⁷⁸ Sierra Club Rehearing Request at 64-65; McCaffree Rehearing Request at 33; State of Oregon Rehearing Request at 35.

whether a project's contribution to climate change renders the project contrary to the public interest.⁷⁷⁹

256. As discussed, the Commission determined that the NGA section 3 project was not inconsistent with the public interest and the NGA section 7 project was required by the public convenience and necessity based on all information in the record, including the projects' GHG emissions.⁷⁸⁰ These annual emissions could impact the State of Oregon's ability to meet its greenhouse gas reduction goals; however, the Commission found that the projects, if constructed and operated as described in the Final EIS with required conditions, are environmentally acceptable actions and, consequently, based on all the other factors discussed in the Authorization Order, the Jordan Cove LNG Terminal is not inconsistent with the public interest and the Pacific Connector Pipeline is required by the public convenience and necessity.⁷⁸¹ We affirm that decision.

Q. Water Resources and Wetlands

1. The Projects Will Not Have Significant Environmental Impacts on Water Resources or Wetlands

257. The State of Oregon and Sierra Club assert that the Commission violated NEPA because the Final EIS underestimates or ignores the LNG terminal's and the pipeline's impacts to water resources and wetlands and because the Final EIS fails to adequately include and analyze mitigation measures for these impacts.⁷⁸² Based on these flaws, they also argue that the conclusions that the projects would not significantly affect surface water resources are not supported.

258. The Final EIS explains that terminal and pipeline construction and operations would impact wetlands, groundwater, and surface water, but these impacts would not result in significant environmental impacts.⁷⁸³

259. With regard to wetlands, as discussed in the Final EIS, the terminal would impact 86.1 acres of wetlands, including 22.3 acres of wetland loss, while the pipeline would

⁷⁷⁹ Sierra Club Rehearing Request at 64 (citing *Sierra Club v. FERC*, 867 F.3d at 1373).

⁷⁸⁰ *See supra* PP 64, 65.

⁷⁸¹ Authorization Order, 170 FERC ¶ 61,202 at P 294.

⁷⁸² State of Oregon Rehearing Request at 30-31, 50-57, 59-61, 63-70, 72-77; Sierra Club Rehearing Request at 94-106.

⁷⁸³ Final EIS at 5-4.

impact 114.1 acres of wetlands and have long-term impacts on 4.9 acres of wetlands.⁷⁸⁴ As discussed in more detail below, based on Jordan Cove and Pacific Connector's implementation of mitigation measures to reduce impacts on wetlands, the Final EIS determines that constructing and operating the project would not significantly affect wetlands.⁷⁸⁵ Jordan Cove and Pacific Connector also developed a Compensatory Wetland Mitigation Plan to comply with Army Corps requirements, with impacts on freshwater wetland resources mitigated in-kind through the Kentuck Slough Wetland Mitigation Project (Kentuck project)⁷⁸⁶ and impacts on estuarine wetland resources mitigated in-kind through the Eelgrass Mitigation site.⁷⁸⁷

260. The projects would not significantly affect groundwater resources. At the terminal, Jordan Cove would implement best management practices and other measures to address any inadvertent releases of equipment-related fluids.⁷⁸⁸ At the pipeline, construction and operations could impact springs, seeps, and wells, but any impacts to flow and volume or from inadvertent releases of equipment-related fluids would be mitigated through measures described in its Groundwater Supply Monitoring and Mitigation, Spill Prevention, Containment, and Countermeasures Plan, and Contaminated Substances Discovery Plan.⁷⁸⁹

⁷⁸⁴ *Id.*

⁷⁸⁵ Final EIS at 4-139.

⁷⁸⁶ The Kentuck project includes 140 acres on the eastern shore of Coos Bay at the mouth of the Kentuck Slough. Final EIS at 2-18. Approximately 9.1 acres of the Kentuck project site would be enhanced and restored to mitigate for permanent impacts on freshwater wetlands. *Id.* at 4-134. Approximately 100.6 of the Kentuck project site would be enhanced and restored to mitigate for permanent impacts on estuarine wetlands and aquatic resources. *Id.* at 4-134 to 4-135.

⁷⁸⁷ The Eelgrass Mitigation site is in Coos Bay near the Southwest Oregon Regional Airport. Final EIS at 2-18. Approximately 9.3 acres at the Eelgrass Mitigation site would be enhanced to mitigate for permanent impacts on aquatic resources. *Id.* at 4-134 to 4-135. Jordan Cove also proposes, in addition to the Eelgrass Mitigation site, to remove eelgrass from the access channel prior to dredging and to transplant it into the Jordan Cove embayment, a shallow, low-gradient embayment with continuous to patchy eelgrass beds located approximately 0.5 mile east of the access channel. *Id.* at 4-135.

⁷⁸⁸ *Id.* at 5-2.

⁷⁸⁹ *Id.* at 5-4.

261. Finally, the Final EIS determines that while the projects would impact surface waters, these impacts would not be significant. The construction of the terminal will temporarily increase turbidity and sedimentation due to initial dredging and such impacts would occur again with maintenance dredging.⁷⁹⁰ The LNG carriers will also impact water quality due to discharges of ballast water and engine operations, but these impacts would be highly localized and minor and would not significantly affect water quality.⁷⁹¹ The pipeline would be constructed across or in close proximity to 337 waterbodies, 257 of which are intermittent streams and ditches, 68 are perennial waterbodies, 5 are major waterbodies, and several of which are ponds and other surface water features.⁷⁹² Pacific Connector would cross waterbodies during low-flow periods and during in-water construction windows when possible and would also implement mitigation to reduce impacts associated with vegetation loss and sedimentation risks during construction.⁷⁹³ Pacific Connector would cross major waterbodies using HDD.⁷⁹⁴

262. The Final EIS therefore determines, and we agree, that impacts on water resources and wetlands would not be significant. Petitioners' more detailed concerns are discussed in depth below.

a. Adequacy of Information

263. The State of Oregon generally contends that the Commission failed to rely on "high quality information and accurate scientific analysis" regarding impacts on water resources, as required under NEPA.⁷⁹⁵ The State of Oregon claims that without developing empirical data and advanced models, the Commission cannot accurately identify the suite of direct and indirect biological changes and impacts that are likely to occur in association with the construction and operation of the LNG terminal and cannot

⁷⁹⁰ *Id.* at 5-3.

⁷⁹¹ *Id.*

⁷⁹² *Id.*

⁷⁹³ Final EIS at 5-3.

⁷⁹⁴ *Id.*

⁷⁹⁵ State of Oregon Rehearing Request at 66 (quoting 40 C.F.R. §§ 1500.1(b), 1502.2 (2019)).

identify the spatial scale over which the impacts are likely to be significant or substantial.⁷⁹⁶

264. The Final EIS fully considers the impact that construction and operation of the Jordan Cove LNG Terminal would have on several biological and ecological resource areas, including: water resources and wetlands;⁷⁹⁷ upland vegetation;⁷⁹⁸ terrestrial⁷⁹⁹ and aquatic wildlife;⁸⁰⁰ threatened, endangered, and special-status species;⁸⁰¹ as well as the amount and type of land needed for construction and operation.⁸⁰² In assessing these and other impacts, Commission staff relied on a variety of studies and other reference material, a complete list of which was provided to the public.⁸⁰³ Under NEPA, agencies are “entitled to wide discretion in assessing ... scientific evidence”⁸⁰⁴ and the State of Oregon does not demonstrate that Commission staff’s reliance on this evidence prevented staff from considering the “full suite” of impacts, or their “spatial scale.”⁸⁰⁵

b. Mitigation Measures

265. The State of Oregon and Sierra Club contend that the Commission’s determination that the Jordan Cove LNG Terminal’s impacts on water quality would not be significant is unsupported, as it appears to be based on “purported reliance” on mitigation and minimization measures, details of which Sierra Club states has not been provided to

⁷⁹⁶ *Id.* at 65-66.

⁷⁹⁷ Final EIS at 4-84 to 4-94, 4-123 to 4-135.

⁷⁹⁸ *Id.* at 4-150 to 4-159.

⁷⁹⁹ *Id.* at 4-185 to 4-199.

⁸⁰⁰ *Id.* at 4-235 to 4-270.

⁸⁰¹ *Id.* at 4-317 to 4-420.

⁸⁰² *Id.* at 4-420 to 4-434.

⁸⁰³ *Id.* at app. P.

⁸⁰⁴ *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d at 1301.

⁸⁰⁵ State of Oregon Rehearing Request at 66; *see also Mountain Valley*, 161 FERC ¶ 61,043 at P 237 (stating that NEPA does not require the Commission to independently collect data, and that reliance on existing literature is appropriate).

266. enable the Commission to reach such a conclusion.⁸⁰⁶ The State of Oregon further asserts that the Commission dismisses adverse environmental impacts on water quality as being “within the purview of the U.S. Army Corps of Engineers”⁸⁰⁷ and otherwise takes issue with Commission staff’s finding that the applicants’ Compensatory Wetland Mitigation Plan would satisfy state and federal regulatory requirements, as it is not yet finalized.⁸⁰⁸

267. Both the State of Oregon and Sierra Club cite to the conclusions of the Commission, or Commission staff, that water quality impacts would not be significant; in doing so, petitioners ignore Commission staff’s detailed analysis of such impacts, as well as the relevant mitigation measures. The Final EIS discusses the potential water quality impacts from construction and operation of the projects, as well as the numerous mitigation measures that would be utilized to address them.⁸⁰⁹ Commission staff examined how the construction and operation of the projects would potentially impact water quality, as well as the numerous mitigation measures intended to minimize such impacts, including, but not limited to: Jordan Cove’s *Wetland and Waterbody Construction and Mitigation Procedures, Dredged Material Management Plan, Erosion and Sedimentation Control Plan, Spill Prevention, Containment, and Countermeasures Control and Sedimentation Plan*, as well as the implementation of construction procedures and operational controls. Commission staff’s analysis addressed how, specifically, Jordan Cove would use these various mitigation measures to avoid, or lessen, water quality impacts.⁸¹⁰

268. Despite the State of Oregon’s assertion, neither the Final EIS nor the Authorization Order dismiss water quality impacts as being a matter solely for the Corps to consider.⁸¹¹ In addition to Commission staff’s own, independent analysis of water quality and wetland impacts and relevant mitigation measures, discussed immediately above, the Final EIS explains that, where unavoidable impacts to wetlands are proposed, the Corps (as well as the EPA and the Oregon Department of State Lands) require that

⁸⁰⁶ Sierra Club Rehearing Request at 96; State of Oregon Rehearing Request at 38-39.

⁸⁰⁷ State of Oregon Rehearing Request at 38.

⁸⁰⁸ *Id.* at 64-65.

⁸⁰⁹ Final EIS at 4-83 to 4-122.

⁸¹⁰ *Id.*

⁸¹¹ State of Oregon Rehearing Request at 38.

Jordan Cove avoid, reduce, and compensate for these impacts.⁸¹² Jordan Cove prepared the Compensatory Wetland Mitigation Plan to address these unavoidable impacts, and is still working with the Corps, the EPA, the Oregon Department of State Lands, and other state and federal agencies to finalize the plan.⁸¹³ Although the Compensatory Wetland Mitigation Plan is noted in the Final EIS' discussion of water quality and wetland impacts, it is not a substitute for Commission staff's independent analysis of water quality and wetland impacts.⁸¹⁴ The State of Oregon may raise any concerns it has about the sufficiency of the Compensatory Wetland Mitigation Program—including subcomponents like the Eelgrass Mitigation plan⁸¹⁵ and the Kentuck Slough Wetland Mitigation project⁸¹⁶—with the Corps, with its own Oregon Department of State Lands, and with the other applicable federal and state agencies.

⁸¹² Final EIS at 4-133 to 4-134.

⁸¹³ *Id.* at 4-134 to 4-135.

⁸¹⁴ *Id.* at 4-83 to 4-122.

⁸¹⁵ The construction of the Jordan Cove LNG Terminal and the modifications to the federal navigation channel would impact approximately two acres of eelgrass habitat. Final EIS at 4-247. Pursuant to the Compensatory Wetland Mitigation Plan, this eelgrass would be removed from the channel and replanted in the nearby Jordan Cove embayment, and a new 9-acre Eelgrass Mitigation site will be created. *Id.* at 4-247, 4-251. The State of Oregon claims that the Eelgrass Mitigation plan does not adequately consider or resolve concerns that the quality of habitat at the mitigation site will differ from the project-impacted site; that sedimentation at the mitigation site might not be conducive to the survival, growth, and propagation of the replanted eelgrass; and that five years of monitoring is too short to evaluate the long-term success given that replanted eelgrass commonly fails in the Pacific Northwest. State of Oregon Rehearing Request at 68-70. The State of Oregon also states that the plan does not adequately demonstrate whether and how alternative sites were considered and rejected. *Id.* at 69.

⁸¹⁶ Both Jordan Cove and Pacific Connector propose to mitigate the loss of wetlands, including estuarine areas, through the Kentuck project on a 140-acre tract on the eastern shore of Coos Bay. Final EIS at 2-18. They will deposit approximately 0.3 million cubic yards of dredged material at the Kentuck project site. *Id.* The State of Oregon argues that the applicants have not updated plans to describe where this material will be relocated to allow a grading plan to be prepared for the Kentuck project site. State of Oregon Rehearing Request at 70. The State of Oregon asserts that an update is necessary to the grading and erosion control plans for both the Eelgrass Mitigation site and the Kentuck project site, which may result in additional or different impacts to fish and wildlife. *Id.*

2. The Projects' Impacts to Surface Water

a. State Water Quality Standards

i. Oregon DEQ's Denial of the Applicants' Water Quality Certification

269. As discussed above, on May 6, 2019, Oregon DEQ issued a denial of Jordan Cove's and Pacific Connector's requests for CWA section 401 water quality certification. Sierra Club and the State of Oregon claim that the terminal and pipeline as authorized will violate Oregon's state water quality standards.⁸¹⁷ Sierra Club states that when Oregon DEQ denied the water quality certifications, Oregon DEQ indicated that the terminal and project could violate certain state standards, specifically: the terminal may violate the Biocriteria Water Quality Standard due to construction, depositing dredged material in upland areas;⁸¹⁸ the pipeline may violate the Dissolved Oxygen Water Quality Standard due to sediment discharge, the placement of slash and vegetation in waterbodies, and fertilizer runoff;⁸¹⁹ the pipeline may violate the temperature total maximum daily loads due to the loss of vegetation during stream crossings;⁸²⁰ the pipeline may violate the pH Water Quality Standard because Pacific Connector did not provide site-specific information on debris flow, stream chemistry, landslide hazard assessment, proposed road use and construction, or a maintenance plan;⁸²¹ the pipeline may violate the Toxics Substances Water Quality Criteria due to construction near contaminated soils and waters; both projects may violate the standard due to stormwater runoff;⁸²² and both projects may violate the State of Oregon's Turbidity Water Quality Standard due to dredging of the terminal and construction of the pipeline.⁸²³

⁸¹⁷ Sierra Club Rehearing Request at 96.

⁸¹⁸ *Id.* at 98-99.

⁸¹⁹ Sierra Club Rehearing Request at 99.

⁸²⁰ *Id.* at 101.

⁸²¹ *Id.* at 100.

⁸²² *Id.* at 102.

⁸²³ *Id.* at 104. The Oregon DEQ certification denial also noted that the terminal may violate Oregon's narrative criteria which are general statements designed to protect the aesthetic and health of a waterway.

270. As discussed, the Commission conditioned its authorization on Jordan Cove and Pacific Connector obtaining all necessary federal authorizations. Specifically, Environmental Condition Number 11 requires that no construction, including no ground-disturbing activities, may occur without necessary federal authorizations or waiver thereof; consequently, there is no risk of any project discharges into waters before resolution of state action under section 401 of the CWA.⁸²⁴ In addition, as discussed above and in more detail below for the temperature and dissolved oxygen, the Commission fully considered the projects' impacts to water quality and determined that there would be no significant impacts.

ii. **Dissolved Oxygen and Temperature at the Jordan Cove LNG Terminal**

271. The State of Oregon argues that the Jordan Cove LNG Terminal will violate dissolved oxygen protections under the CWA. According to the state, the Coos Bay estuary is listed in Oregon's Integrated Report as a Category 5 waterbody for dissolved oxygen,⁸²⁵ which means the applicable state water quality standard is not being met and that a Total Maximum Daily Load standard must be adopted.⁸²⁶ Until this standard is adopted, Oregon claims that the CWA prohibits any discharges that worsen dissolved oxygen levels in the estuary.⁸²⁷ The State of Oregon argues the Commission has already conceded that the project will violate the CWA because the Final EIS notes that the cumulative impacts in the estuary associated with the project and the Port of Coos Bay Channel Modification will result in an increase in salinity up to 1.5% and "some

⁸²⁴ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 11.

⁸²⁵ The State of Oregon claims that the Coos Bay estuary is listed as impaired for dissolved oxygen and temperature on its CWA § 303(d)(1) list but offers no support for this finding. The State of Oregon's currently effective CWA § 303(d)(1) list, known as the 2012 Integrated Report on Water Quality (Integrated Report), does not list Coos Bay as impaired for dissolved oxygen or temperature.
<https://www.deq.state.or.us/wq/assessment/rpt2012/results.asp>.

⁸²⁶ State of Oregon Rehearing Request at 38-39.

⁸²⁷ *Id.* at 39 (citing *Friends of Pinto Creek v. EPA*, 504 F.3d 1007 (9th Cir. 2007) (*Friends of Pinto Creek*). We note that *Friends of Pinto Creek* is inapposite. There the state had an approved CWA § 303(d)(1) list, but it had not prepared the required Total Maximum Daily Load standard. *Friends of Pinto Creek*, 504 F.3d 1011. As discussed, Coos Bay estuary is not listed as impaired for dissolved oxygen or temperature under Oregon's currently effective Integrated Report.

decrease” in dissolved oxygen.⁸²⁸ According to the State of Oregon, the project will violate water quality standards and the Commission cannot rely upon unknown mitigation, which will presumably be implemented by the Army Corps, to offset known violations of water quality standards.⁸²⁹

272. The Final EIS analyzes the cumulative impacts of the Port of Coos Bay’s Channel Modification and the project. The Final EIS reports the Army Corps’ modeled impacts on dissolved oxygen and salinity from the Port of Coos Bay Channel Modification.⁸³⁰ The Final EIS explains that tidal exchange rates are the main factor affecting salinity and dissolved oxygen levels in the bay, and that recent Army Corps modeling for the more impactful Port of Coos Bay Channel Modification showed that after channel modification changes, tidal levels and current velocities in the bay would not occur except in a very limited area.⁸³¹ The Army Corps modeling for the Port of Coos Bay Channel Modification found despite slight decreases, all dissolved oxygen levels, even during periods of lowest levels, would remain well oxygenated at over 7.7 milligrams per liter.⁸³² The Final EIS recognizes that the scope of dredging in the bay for the Jordan Cove LNG Terminal is less than the Port of Coos Bay Channel Modification project.⁸³³ Thus, the Final EIS appropriately concludes that the LNG terminal’s impacts on dissolved oxygen and salinity when considered with the Port of Coos Bay Channel Modification would not be substantial and that the impacts of the project on water quality would not be significant.⁸³⁴

273. Nonetheless, the State of Oregon argues that the Commission may not abdicate its responsibility under the CWA by deferring to mitigation to be required when the Army Corps’ approves its channel modification because, the State of Oregon claims, the current record suggests that state water quality standards will be violated,⁸³⁵ citing *American*

⁸²⁸ *Id.* at 38 (citing Final EIS at 4-836).

⁸²⁹ *Id.* at 40-41 (citing *Am. Rivers v. FERC*, 895 F.3d 32, 54 (D.C. Cir. 2018)).

⁸³⁰ Final EIS at 4-94.

⁸³¹ *Id.*

⁸³² *Id.*

⁸³³ *Id.*

⁸³⁴ *Id.*

⁸³⁵ State of Oregon Rehearing Request at 40-41.

*Rivers v. FERC*⁸³⁶ and *Save Our Cabinets v. USDA* for support.⁸³⁷ Neither case is dispositive. In *American Rivers v. FERC*, the court ruled that the Commission failed to fully examine mitigation for a hydroelectric project to address data that showed that the existing dam violated the state's water quality standard for dissolved oxygen.⁸³⁸ As discussed, our NEPA analysis shows that the cumulative impacts on dissolved oxygen will not significantly impair water quality. In *Save Our Cabinets v. USDA*, the court determined that the Forest Service violated the CWA by issuing a decision spanning four phases of a mining project, but the state had only approved a water quality permit for the first phase and the Forest Service had failed to support its decision when evidence in the record showed that subsequent phases would violate the state's nondegradation standard.⁸³⁹ Here, the Commission's Authorization Order has no bearing on the channel modification. Moreover, although we are unable to confirm, as the State of Oregon alleges, that the Coos Bay estuary is impaired for dissolved oxygen and temperature, even if it were, the EIS shows that the Jordan Cove LNG Terminal, when considered cumulatively, will result in little more than minimal impacts on either parameter, either in scope or in magnitude.

iii. Stream Temperature

274. The State of Oregon and Sierra Club argue that the Final EIS errs in claiming that the pipeline's impacts on water temperature will be minor and are adequately mitigated.⁸⁴⁰ Rather, the State of Oregon claims, the project will have a significant impact on water temperature due to the project's clearing of riparian vegetation at stream crossings, and along rights of way in proximity to streams.⁸⁴¹ The State of Oregon claims that modeling and monitoring of stream temperatures in certain locations shows that temperatures will exceed state temperature total maximum daily loads developed pursuant to the CWA.⁸⁴² For example, the total maximum daily load for the Upper Klamath River and Lost River Subbasins does not allow any additional warming above

⁸³⁶ 895 F.3d at 32.

⁸³⁷ 254 F.Supp.3d 1241, 1254–55 (D. Mont. 2017).

⁸³⁸ *Am. Rivers v. FERC*, 895 F.3d at 54.

⁸³⁹ *Save Our Cabinets v. U.S. Dep't of Agric.*, 254 F. Supp. 3d at 1251.

⁸⁴⁰ State of Oregon Rehearing Request at 56, 75-76; Sierra Club Rehearing Request at 106.

⁸⁴¹ State of Oregon Rehearing Request at 56.

⁸⁴² *Id.* at 56, 75-76.

0 degrees Celsius (°C) from ground disturbing activity, the total maximum daily load for the Rogue River Basin limits any cumulative increase to 0.04 °C, and the total maximum daily load for the Umpqua River Basin sets the cumulative increase at 0.1 °C.⁸⁴³ The State of Oregon acknowledges that the Final EIS states that project temperature increases will be short term or that the increases can be reduced through a generalized plan to require planting of new riparian vegetation, but claims that despite discussion with Pacific Connector, Pacific Connector has not developed plans to show whether or how additional site-specific mitigation can occur to ensure compliance with applicable state limitations.⁸⁴⁴ The State of Oregon argues that the Commission should have considered mitigation that produces in-kind canopy mitigation for trees harvested adjacent to streams.⁸⁴⁵

275. We do not anticipate any violations of the state's total maximum daily load standards. The Final EIS acknowledges that construction within riparian areas could affect aquatic resources by increasing erosion and runoff to nearby streams, losing future large wood input to streams, and increasing stream temperatures.⁸⁴⁶ However, any changes in water temperature, related to the 75-to 95-foot-wide right-of-way vegetation clearing at waterbody crossings, are likely to be very small and undetectable through temperature measurements, except for possibly the very smallest perennial streams and occasional intermittent flowing streams that may have flow during a hot period. Any temperature changes that may occur would gradually be reduced or eliminated over time as most riparian vegetation, either from plantings or natural vegetation regrowth, would increase stream shading.⁸⁴⁷

276. The Final EIS includes BLM and Forest Service modeling to support this finding. BLM and Forest Service modeled specific streams to be crossed by the pipeline, which showed that clearings could result in an increase in temperature depending on stream size and flow.⁸⁴⁸ Pacific Connector also assessed temperature increases due to loss of riparian vegetation using a Stream Segment Temperature Model.⁸⁴⁹ The average modeled

⁸⁴³ *Id.* at 76.

⁸⁴⁴ State of Oregon Rehearing Request at 57, 77.

⁸⁴⁵ *Id.* at 75.

⁸⁴⁶ Final EIS at 4-276, 4-299.

⁸⁴⁷ *Id.* at 4-302.

⁸⁴⁸ *Id.* at 4-300.

⁸⁴⁹ *Id.* at 4-118 to 4-119.

temperature increase across a cleared right-of-way for a group of streams were slight, 0.03°F, and the maximum increase among the streams was 0.3°F.⁸⁵⁰ This modeling did not account for proposed mitigation within the watershed that may reduce waterbody impacts and literature studies described in the Final EIS that determined that changes in temperature, especially in small streams, may recover quickly from cooler surrounding conditions downstream⁸⁵¹; therefore, the model's findings can be considered conservative. Estimated stream temperature changes that would result from right-of-way clearing and permanent maintenance are expected to be minor and potential cumulative watershed temperature increases from project riparian clearing would be unlikely.⁸⁵²

277. Although these impacts are relatively minor, potential effects would be reduced by best management practices, including the *Erosion Control and Revegetation Plan* and the applicant's Plan and Procedures. For example, Pacific Connector will also limit right-of-way crossings to 75 feet and will locate temporary work areas 50 feet back from waterbody crossings.⁸⁵³ Pacific Connector will also mitigate potential temperature increases on waterbodies through riparian plantings. This would include, as mitigation for the loss of riparian shade vegetation, replanting the streambanks after construction to stabilize banks and replanting the equivalent of 1:1 ratio for acres of construction or 2:1 for permanent riparian vegetation loss with the goal to restore shade along the affected or nearby stream channels in the same watershed.⁸⁵⁴ In light of these measures, we find that no additional mitigation is necessary.

b. Cooling Water Discharges

278. The State of Oregon argues that LNG tanker cooling water discharges will result in temperature increases in and near the project and will likely result in violations of state water quality standards,⁸⁵⁵ but does not elaborate on this point or offer any evidence that cooling water discharges will violate any specific water quality standard. The Final EIS determines that cooling water discharges would have temporary and negligible

⁸⁵⁰ *Id.* at 4-118, 4-300.

⁸⁵¹ *Id.* at 4-300 to 4-301.

⁸⁵² *Id.* at 4-301.

⁸⁵³ *Id.*

⁸⁵⁴ *Id.* at 4-120.

⁸⁵⁵ State of Oregon Rehearing Request at 39.

impacts.⁸⁵⁶ Jordan Cove modeled slip temperature changes resulting from the discharge of engine cooling water by an LNG carrier. The results show that the thermal effect of LNG carrier operations at the berth would have very minimal impact on water temperatures.⁸⁵⁷

c. **Horizontal Directional Drilling for Pipeline Crossings**

279. The State of Oregon argues that the Commission failed to mitigate the high risk of an inadvertent release of HDD fluid, otherwise known as a frac-out, when Pacific Connector uses HDD to cross the Coos Bay estuary, and the Coos, Rogue, and Klamath Rivers.⁸⁵⁸ The state contends that required mitigation contained in the *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* is not sufficient because the only requirement is that drilling fluids released to tidal areas of the Coos Bay estuary would be contained and removed, but otherwise there is no requirement that any specific measures would be used to contain drilling fluid.⁸⁵⁹

280. As discussed in the Final EIS⁸⁶⁰ and above,⁸⁶¹ the *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* contains several measures designed to prevent frac-outs and mitigate the effects of one in the event a frac-out should occur. Specifically, in the event of a frac-out in an estuarine or aquatic environment, Pacific Connector would halt HDD operations, and seal the leak, and develop a site-specific treatment plan in coordination with appropriate agencies.⁸⁶² While the particular suite of mitigation measures employed at a potential frac-out would vary in accordance with the site-specific treatment plan, the *Drilling Fluid Contingency Plan for Horizontal Directional Drilling Operations* provides for mitigation measures including the use of containment structures, monitoring downstream of the HDD to identify drilling mud accumulations, and, if possible, removal of the drilling mud.⁸⁶³ Therefore, we find that

⁸⁵⁶ *Id.* at 4-93.

⁸⁵⁷ Final EIS at 4-94.

⁸⁵⁸ State of Oregon Rehearing Request at 51-52.

⁸⁵⁹ *Id.*

⁸⁶⁰ Final EIS at 4-93.

⁸⁶¹ *See supra* P 186.

⁸⁶² Final EIS at 4-277.

⁸⁶³ *Id.*

the potential impacts from frac-outs on estuarine and aquatic environments have been adequately addressed.

d. Impacts to Fish-Bearing Streams

281. The State of Oregon argues that the Commission has failed to take the requisite hard look at the 155 fish-bearing stream crossings associated with the pipeline,⁸⁶⁴ Alleging that the negative effects to aquatic/stream habitats resulting from construction and operation of the pipeline will reduce the productive value of the habitats of native fish and amphibians that use these streams and waterways. According to the State of Oregon, there may be significant sedimentation risks, particularly when construction occurs on steep slopes. The State of Oregon notes that coastal sandstone soils are highly susceptible to mass-wasting when undercut, deconsolidated, de-vegetated, and generally disturbed⁸⁶⁵ and also states that Commission should have considered mitigation that produces in-kind canopy mitigation for trees harvested adjacent to streams and other measures to mitigate the loss of large woody debris in streams.⁸⁶⁶

282. The Final EIS fully considers the effects on waterbodies and resident and anadromous fish from the removal of riparian vegetation due to stream crossings during construction.⁸⁶⁷ The Final EIS takes a hard look at temperature changes to streams, as described above,⁸⁶⁸ and also assessed slope failures and erosion along streambeds that could increase sediment, decreased large woody debris in streams, and, while not raised by petitioners, the loss of terrestrial food for aquatic organisms.⁸⁶⁹

283. With regard to the loss of large woody debris, Pacific Connector would replant native tree and shrub species along all fish-bearing streams.⁸⁷⁰ Only 23% of the former riparian vegetation cleared by pipeline construction would be restricted to low-growth (herbaceous) vegetation. Approximately 77% of affected riparian vegetation would be allowed to return to pre-construction conditions, thereby reducing impacts on fish

⁸⁶⁴ State of Oregon Rehearing Request at 74.

⁸⁶⁵ *Id.*

⁸⁶⁶ *Id.* at 75.

⁸⁶⁷ Final EIS at 4-299.

⁸⁶⁸ *See supra* PP 274-277.

⁸⁶⁹ Final EIS at 4-299.

⁸⁷⁰ *Id.*

resources.⁸⁷¹ To reduce the impact of clearing riparian vegetation and the subsequent reduction in large woody debris to affected waterbodies, Pacific Connector has developed and would implement a *Large Woody Debris Plan* which includes a proposal to install 733 pieces of large woody debris over several fifth-field watersheds along the pipeline route where the two ESA-listed coho salmon ESUs are present.⁸⁷² Additionally, construction and operation of the pipeline would not affect the introduction of large woody debris from upstream sources.

284. The State of Oregon also raises concerns of slope failure near waterbody crossings.⁸⁷³ The Final EIS acknowledges that slope failures could result in soil deposition and sedimentation of nearby waterbodies and also describes the impacts of turbidity and sedimentation on water quality and aquatic wildlife. As reported in the Final EIS, Pacific Connector considered slope stability in its proposed route and rerouted the pipeline to avoid potentially unstable areas.⁸⁷⁴ Some segments of the pipeline route were not accessible to Pacific Connector surveyors and slopes within these segments were not subject to risk analysis. The Final EIS explains that once Pacific Connector has access to these sites, Pacific Connector will assess slope failure; if Pacific Connector determines that the risk of slope failure remains unacceptable, it may reroute the pipeline or implement additional stabilization measures.⁸⁷⁵ We note that the Director of the Office of Energy Projects retains authority, under environmental condition 3 of the Authorization Order, to require any additional measures necessary to protect the environment.⁸⁷⁶

3. Wetlands and Estuary Impacts

a. Dredging Impacts

285. The State of Oregon claims that the Final EIS superficially considers the potential effects of dredging on aquatic habitat and species in the Coos Bay estuary.⁸⁷⁷ The state

⁸⁷¹ *Id.* at 4-302.

⁸⁷² *Id.*

⁸⁷³ State of Oregon Rehearing Request at 72.

⁸⁷⁴ Final EIS at 4-296.

⁸⁷⁵ *Id.*

⁸⁷⁶ Authorization Order, 170 FERC ¶ 61,202 at app., envtl. condition 3.

⁸⁷⁷ The State of Oregon attempts to incorporate supplemental comments on the Final EIS filed by the Oregon Department of Fish and Wildlife. Such incorporation by

provides one example where the Final EIS estimates the rate of recovery of affected benthic habitat and species based on a prior study of a group of small-bodied, rapidly-growing invertebrate species, a study group that according to the State of Oregon does not represent the large-bodied, long-lived bay clams in the estuary.⁸⁷⁸

286. We disagree and find that the Final EIS fully considers the impact of dredging on disturbed benthic habitat and species. In response to comments on the Draft EIS,⁸⁷⁹ the Final EIS acknowledges that dredging would remove a variety of organisms with differing rates of recovery.⁸⁸⁰ The Final EIS cites and summarizes findings from five studies about the recovery of various benthic communities to pre-dredging conditions⁸⁸¹ and concluded that recovery would likely occur on different timescales for different species: rapid initial colonization in six months after dredging, recovery for most typical benthic species within a year, and no recovery for some species, such as “longer-lived benthic resources (e.g., clams)” that could take several years to fully recover, because initial dredging will be followed by a 3- to 10-year maintenance dredging period.⁸⁸²

287. The State of Oregon also asserts that the Final EIS incorrectly illustrates the major known oyster and shrimp habitat and clamming and crabbing areas in the bay, despite the fact that Oregon Department of Fish and Wildlife provided comments on the Draft EIS noting the error.⁸⁸³

288. The Final EIS responds to the State of Oregon’s comments on the Draft EIS, explaining that the map of these habitats and resources was generated from a cited

reference is improper and is dismissed. *See supra* P 15.

⁸⁷⁸ State of Oregon Rehearing Request at 66-67.

⁸⁷⁹ Final EIS at app. R, Response SA2-122; *id.* app. R,R-337 (“Wildlife and Aquatic Resources 5”).

⁸⁸⁰ *Id.* at 4-254 to 4-255.

⁸⁸¹ *Id.* at 4-255. Commission staff relied on a variety of studies and other reference material to compose the Final EIS. A complete list of which was provided to the public. *See id.* app. P.

⁸⁸² *Id.* at 4-255.

⁸⁸³ State of Oregon Rehearing Request at 67.

document and considered to generally represent the habitat types present in Coos Bay.⁸⁸⁴ The Final EIS notes that further details about site-specific categories of commercially important species would not substantially change the assessment in the Final EIS.⁸⁸⁵ But the Final EIS does modify language and figure 4.5-2 to provide greater clarity.⁸⁸⁶ For example, the Final EIS acknowledges, based on information provided by Oregon Department of Fish and Wildlife in 2019, that locally-known clamming areas occur west and southwest of the end of the regional airport runway and along the shoreline near the Eelgrass mitigation site.⁸⁸⁷ Under NEPA, agencies are “entitled to wide discretion in assessing ... scientific evidence”⁸⁸⁸ and the State of Oregon does not demonstrate that Commission staff’s reliance on this evidence resulted in a flawed analysis.

289. The State of Oregon claims that the Final EIS underestimates the potential loss of sediment associated with the dredging of four navigational channel enhancements and subsequent impacts on aquatic resources, especially eelgrass.⁸⁸⁹ The State of Oregon also asserts that lost sediment may result in further impacts to and loss of eelgrass and benthic invertebrates, and may result in further degradation of the shellfish and fish habitat.⁸⁹⁰

290. The impacts from the potential loss of sediment due to dredging the proposed four navigational channel enhancements in Coos Bay are addressed throughout the Final EIS.⁸⁹¹ The Final EIS acknowledges that side slope equilibration would occur following dredging of the navigational channel over a 6- to 8-year period⁸⁹² and also acknowledges that this equilibration and subsequent potential slumping would vary depending on site-specific characteristics. Out of four dredging areas, two sites would experience slight changes in slope equilibration and the other two sites could experience slope equilibration

⁸⁸⁴ Final EIS at app. R, Response SA2-121. A complete list of reference material was provided to the public. *See id.* app. P.

⁸⁸⁵ *Id.*

⁸⁸⁶ *Id.* at 4-255 fig. 4.5-2; *id.* app. R, Response SA2-121.

⁸⁸⁷ *Id.* at 4-245.

⁸⁸⁸ *Earth Island Inst. v. U.S. Forest Serv.*, 351 F.3d at 1301.

⁸⁸⁹ State of Oregon Rehearing Request at 69.

⁸⁹⁰ *Id.*

⁸⁹¹ *E.g.*, Final EIS at 2-10, 2-17 to 2-18, 2-55, 4-86.

⁸⁹² *Id.* at 4-54, 4-250.

extending 300 to 700 feet upslope from the dredged areas.⁸⁹³ In total, these affected areas are a small portion of Coos Bay and are considered deep-water habitat, which is a common habitat in the bay.⁸⁹⁴ Impacts on eelgrass,⁸⁹⁵ benthic vertebrates,⁸⁹⁶ wildlife,⁸⁹⁷ aquatic species and habitat,⁸⁹⁸ and water quality,⁸⁹⁹ which would all be affected by the project, are discussed in the Final EIS.⁹⁰⁰ Last, the Final EIS discusses Jordan Cove's proposal to mitigate for the loss of aquatic vegetation.⁹⁰¹ We find that the State of Oregon's claim that sediment loss in dredged areas will be substantial and significant is unsupported.

4. Ground Water Impacts

a. Jordan Cove LNG Terminal's Ground Water Impacts

291. Sierra Club argues that although the Final EIS acknowledges the potential for groundwater reduction and contamination related to the construction and operation of the LNG terminal, it does not provide an analysis of the environmental harm that is likely to occur from these impacts: e.g., harm to species from lost wetland and lake habitat from groundwater withdrawals, long-term impacts to sensitive coastal species or Coos Bay community (including fisheries) from contamination of groundwater. Sierra Club also states that the Final EIS does not appear to provide an analysis of alternatives, including ways to reduce water use and groundwater contamination.⁹⁰²

292. Sierra Club states that the Draft EIS identified that the nearest well might drop by 0.5 feet, but the Final EIS fails to acknowledge the potential reduction in that well and

⁸⁹³ *Id.*

⁸⁹⁴ *Id.* at 4-257.

⁸⁹⁵ *Id.* at 4-134, 4-191, 4-251.

⁸⁹⁶ *Id.* at 4-133, 4-238, 4-241, 4-250 to 4-256, 4-270.

⁸⁹⁷ *Id.* at 4-196, 4-235, 4-247.

⁸⁹⁸ *Id.* at 4-249 to 4-270.

⁸⁹⁹ *Id.* at 4-76 to 4-79, 4-84 to 4-94, 4-123 to 4-135.

⁹⁰⁰ *Id.* at 4-87, 4-132, 4-249, 4-252 to 4-254.

⁹⁰¹ *E.g., id.* at 4-133.

⁹⁰² Sierra Club Rehearing Request at 104-106.

fails to consider what that drop would do to local lakes and wetlands, including the wetlands in the proposed mitigation site close to the well. Further, Sierra Club asserts that participants in scoping asked the Commission to consider the impact of using these wells on the Oregon Dunes ecosystem, but the Final EIS fails to address the issue.⁹⁰³

293. Sierra Club states that the Final EIS fails to take a hard look at the potential impacts of the Jordan Cove LNG Terminal project on several potentially affected communities and their drinking supplies, many of which are already sensitive to contaminants of concern and many of which have already invested in expensive technology to clean and disinfect water.⁹⁰⁴

294. We disagree and deny rehearing on these issues. The Final EIS acknowledges that project-related groundwater withdrawals would impact surface water resources.⁹⁰⁵ The Final EIS describes modeling completed by the applicants that estimates the maximum drawdown of wells could be up to 6 inches but would usually be less.⁹⁰⁶ However, the impact of this drawdown would likely be temporary, as about 90% of project water use at the LNG terminal would occur during construction.⁹⁰⁷ Following construction, naturally occurring groundwater replenishment would occur and groundwater levels are expected to return to normal levels. The Final EIS acknowledges that the withdrawal and use of groundwater may impact wetlands and surrounding vegetation.⁹⁰⁸ These impacts would occur primarily during construction and, as described above, are expected to return to pre-disturbance conditions following construction.

b. Pacific Connector Pipeline's Drinking Water Impacts

295. Sierra Club objects to Pacific Connector's proposed mitigation measures in the event the Pacific Connector Pipeline impacts groundwater supplies.⁹⁰⁹ Sierra Club

⁹⁰³ *Id.* at 106.

⁹⁰⁴ *Id.*

⁹⁰⁵ Final EIS at 4-77.

⁹⁰⁶ *Id.*

⁹⁰⁷ *Id.* at 4-77 tbl. 4.3.1.1-1.

⁹⁰⁸ *Id.* at 4-133, 4-156.

⁹⁰⁹ *Id.* Specifically, if a groundwater supply is affected by the project, Pacific Connector would work with the landowner to provide a temporary supply of water; if determined necessary, Pacific Connector would provide a permanent water supply to replace affected groundwater supplies (restore, repair, or replace); and mitigation

asserts that trucking in bottled water, or piping in drinking water from an alternate water source, would not fully mitigate the loss of groundwater, due to high costs, the difficulty associated with implementing this requirement, residents' decline in quality of life, and the significant reduction in land value.⁹¹⁰

296. The Final EIS and Authorization Order explain that the pipeline would cross wellhead protection areas and be in proximity to groundwater-fed springs and seeps and private wells.⁹¹¹ The Final EIS determines that the project would not significantly affect groundwater resources due to required mitigation, including Pacific Connector's *Groundwater Supply Monitoring and Mitigation Plan* for springs, seeps, and wells located within 200 feet of construction disturbance, *Spill Prevention, Containment, and Countermeasures Plan* and *Contaminated Substances Discovery Plan*.⁹¹² We address concerns regarding potential impacts to landowners' wells above.⁹¹³ No additional mitigation is necessary.

297. In addition, Sierra Club alleges that the Commission failed to assess the projects' impacts on municipal water supplies.⁹¹⁴ The Final EIS determines that the Jordan Cove LNG Terminal would not impact any Coos Bay – North Bend Water Board wells,⁹¹⁵ and that neither the Jordan Cove LNG Terminal nor the Pacific Connector Pipeline would impact any EPA-designated sole-source aquifers,⁹¹⁶ with the nearest aquifer located approximately forty miles from either project.⁹¹⁷ As noted in the Final EIS and the

measures would be coordinated with the individual landowner to meet the landowner's specific needs and would be tailored to each property. Final EIS at 4-83.

⁹¹⁰ *Id.*

⁹¹¹ Authorization Order, 170 FERC ¶ 61,202 at P 205; EIS at 4-77 to 4-81.

⁹¹² *Id.* P 205.

⁹¹³ *See supra* P 183.

⁹¹⁴ Sierra Club Rehearing Request at 106.

⁹¹⁵ Final EIS at 4-76, 4-80.

⁹¹⁶ Per the EPA, a "sole-source aquifer" supplies at least 50% of the drinking water in an area where no alternative drinking water source is available that could physically, legally, or economically supply the area.

⁹¹⁷ Final EIS at 4-80.

Authorization Order,⁹¹⁸ the Pacific Connector Pipeline will cross six wellhead protection areas.⁹¹⁹ However, as explained above, with the implementation of Pacific Connector's mitigation measures, impacts to groundwater resources, which would include municipal water supplies, would not be significant.⁹²⁰

R. Forest Plans

298. Sierra Club claims that the Authorization Order violates the National Forest Management Act because the Forest Service's proposed amendments essentially exempt the Pacific Connector Pipeline from numerous forest plan requirements to preserve and protect National Forests affected by the pipeline.⁹²¹ Sierra Club argues that the Forest Service failed to adhere to 2012 Forest Service requirements that the Forest Service create new plan components that meet the resource protection requirements that the Pacific Connector Pipeline project cannot meet.⁹²² Sierra Club also claims that the Forest Service and the Commission failed to properly analyze the proposed forest plan amendments or identify, let alone analyze, other needed amendments to forest plans related to Late-Successional Reserve land, soil, water quality, riparian areas, and other resources.⁹²³

299. The Pacific Connector Pipeline will cross approximately 31 miles of Forest Service lands within the Umpqua, Rogue River, and Winema National Forests.⁹²⁴ The Forest Service operates the lands under forest plans known as Land and Resource Management Plans pursuant to the National Forest Management Act.⁹²⁵ Contrary to Sierra Club's claims, the Commission did not propose any Land and Resource

⁹¹⁸ *Id.* at 4-80 to 4-81; Authorization Order, 170 FERC ¶ 61,202 at P 205.

⁹¹⁹ A wellhead protection area is defined as the surface and subsurface area surrounding a water well or well field, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such a water well or well field. Final EIS at 4-80.

⁹²⁰ *See supra* P 294.

⁹²¹ Sierra Club Rehearing Request at 91-92.

⁹²² *Id.* at 92.

⁹²³ *Id.* at 93-94.

⁹²⁴ Authorization Order, 170 FERC ¶ 61,202 at P 232.

⁹²⁵ *See id.*

Management Plan amendments and the Authorization Order has no impact on the Forest Service's proposed amendment process; the Land and Resource Management Plan process is exclusively within the Forest Service's jurisdiction. The Forest Service analyzed amending its Land and Resource Management Plans to allow for the project to be sited within forest lands and solicited comments on the proposed amendments during the Draft EIS comment period.⁹²⁶ The Forest Service will make final decisions on the respective authorizations before it, and Pacific Connector must obtain a right-of-way grant from BLM pursuant to the Mineral Leasing Act to cross federal lands, which may include compensatory mitigation requirements recommended by the Forest Service.⁹²⁷

300. Sierra Club also suggests that, because the pipeline project allegedly violates the National Forest Management Act, the Commission should not have authorized the pipeline until these issues were resolved.⁹²⁸ As discussed, the Commission appropriately conditioned its authorization in Environmental Condition 11 on Pacific Connector obtaining required federal authorizations, including any required right-of-way grant, which are dependent upon required Land and Resource Management Plans amendments, before beginning pipeline construction or any other ground disturbing activities.⁹²⁹

S. Cumulative Impacts

301. Ms. McCaffree argues that the Commission failed to adequately analyze the cumulative impacts of the projects and should have conducted a more searching cumulative impacts analysis beyond citing to tables and lists of historic and proposed actions.⁹³⁰ Sierra Club asserts there was inadequate discussion and analysis of reasonable outgrowth associated with the development of a pipeline and LNG terminal at Coos Bay or the potential for colocation of other pipelines in same corridor to facilitate growth of this industrial development.⁹³¹

302. CEQ defines cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and

⁹²⁶ *Id.*

⁹²⁷ *Id.*

⁹²⁸ Sierra Club Rehearing Request at 5.

⁹²⁹ *See supra* P 75; *see also* Authorization Order, 170 FERC ¶ 61,202 at app., envtl. cond. 11.

⁹³⁰ McCaffree Rehearing Request at 31-32.

⁹³¹ Sierra Club Rehearing Request at 62-63.

reasonably foreseeable future actions.”⁹³² The “determination of the extent and effect of [cumulative impacts], and particularly identification of the geographic area within which they may occur, is a task assigned to the special competency of the appropriate agencies.”⁹³³ CEQ has explained that “it is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.”⁹³⁴ Further, a cumulative impact analysis need only include “such information as appears to be reasonably necessary under the circumstances for evaluation of the project rather than to be so all-encompassing in scope that the task of preparing it would become either fruitless or well nigh impossible.”⁹³⁵ An agency’s analysis should be proportional to the magnitude of a proposed action; actions that will have no significant direct or indirect impacts usually only require a limited cumulative impacts analysis.⁹³⁶ A meaningful cumulative impacts analysis must identify five things: “(1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected *in that area* from the proposed project; (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or expected to have impacts *in the same area*; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected in the individual impacts are allowed to accumulate.”⁹³⁷

303. The Authorization Order noted that the EIS considers the cumulative impacts of the proposed Jordan Cove LNG Terminal and Pacific Connector Pipeline with other

⁹³² 40 C.F.R. § 1508.7 (2019).

⁹³³ *Kleppe v. Sierra Club*, 427 U.S. 390, 414 (1976).

⁹³⁴ CEQ, *Considering Cumulative Effects Under the National Environmental Policy Act* at 8 (Jan. 1997), https://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-ConsidCumulEffects.pdf (1997 CEQ Guidance).

⁹³⁵ *Natural Res. Def. Council, Inc. v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975).

⁹³⁶ See CEQ, Memorandum on Guidance on Consideration of Past Actions in Cumulative Effects Analysis at 2-3 (June 24, 2005) (2005 CEQ Guidance).

⁹³⁷ *TOMAC v. Norton*, 433 F.3d 852, 964 (D.C. Cir. 2006) (emphasis added) (quoting *Grand Canyon Trust v. FAA*, 290 F.3d 339, 345 (D.C. Cir. 2002) (internal quotations omitted). See also *Columbia Gas Transmission, LLC*, 149 FERC ¶ 61,255, at P 113 (2014).

projects in the same geographic and temporal scope of the projects.⁹³⁸ The types of other projects evaluated in the Final EIS that could potentially contribute to cumulative impacts include: Corps permits and mitigation projects, minor federal agency projects (including road/utility improvements, water flow control, weed treatments, and miscellaneous mitigation), residential and commercial development, timber harvest and forest management activities, livestock grazing, and solar panel fields.⁹³⁹ As part of the cumulative impacts analysis, Commission staff also considered non-jurisdictional utilities at the terminal site, the use of LNG carriers, ongoing maintenance dredging, modifications to the Coos Bay Federal Navigation Channel, project impact mitigation projects, and the potential removal of four dams on the Klamath River.⁹⁴⁰

304. As described in the Authorization Order, the Final EIS concludes that, for the majority of resources where a level of impact could be ascertained, the projects' contribution to cumulative impacts on resources affected by the projects would not be significant, and that the potential cumulative impacts of the projects and other projects considered would not be significant.⁹⁴¹ However, the Authorization Order found that the Jordan Cove LNG Terminal and Pacific Connector Pipeline would have significant cumulative impacts on housing availability in Coos Bay, the visual character of Coos Bay, and noise levels in Coos Bay.⁹⁴² We affirm that the analysis of cumulative impacts was consistent with the requirements of NEPA and deny Ms. McCaffree's and Sierra Club's arguments on rehearing.

The Commission orders:

(A) Jordan Cove Energy Project, L.P. and Pacific Connector Gas Pipeline, LP's request for rehearing is hereby granted in part and denied in part, as discussed in the body of the order.

(B) The requests for rehearing filed by the Natural Resources Defense Council; Oregon Department of Energy, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, and Oregon Department of Land Conservation and Development; Sierra Club; the Cow Creek Band of Umpqua Tribe of Indians; the

⁹³⁸ Authorization Order, 170 FERC ¶ 61,202 at PP 267-268; Final EIS at 4-822 to 4-852.

⁹³⁹ Authorization Order, 170 FERC ¶ 61,202 at PP 267-268; Final EIS at 4-825.

⁹⁴⁰ Authorization Order, 170 FERC ¶ 61,202 at PP 267-268; Final EIS at 4-828.

⁹⁴¹ Authorization Order, 170 FERC ¶ 61,202 at PP 267-268; Final EIS at 4-852.

⁹⁴² Authorization Order, 170 FERC ¶ 61,202 at PP 267-268; Final EIS at 4-852.

Klamath Tribes; Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians; and Citizens for Renewables, Inc., Citizens Against LNG, and Jody McCaffree are hereby dismissed or denied, as discussed in the body of this order.

(C) The requests for stay filed by Sierra Club and the Natural Resources Defense Council are dismissed as moot, as discussed in the body of this order.

(D) The requests for rehearing filed by Kenneth E. Cates, Kristine Cates, James Davenport, Archina Davenport, David McGriff, Emily McGriff, Andrew Napell, Dixie Peterson, Paul Washburn, and Carol Williams are rejected, as discussed in the body of this order.

(E) Jordan Cove Energy Project, L.P. and Pacific Connector Gas Pipeline, LP's request for clarification is hereby granted, as discussed in the body of the order, and Environmental Condition No. 34 is modified to read:

Pacific Connector shall file a noise survey with the Secretary no later than 60 days after placing the Klamath Compressor Station in service. If a full load condition noise survey is not possible, Pacific Connector shall provide an interim survey at the maximum possible horsepower load and provide the full load survey no later than 60 days after all liquefaction trains at the LNG Terminal are fully in service. If the noise attributable to the operation of all of the equipment at the Klamath Compressor Station under interim or full horsepower load conditions exceeds an Ldn of 55 dBA at any nearby NSAs, Pacific Connector shall file a report on what changes are needed and shall install the additional noise controls to meet the level within 1 year of the in-service date that immediately preceded the noise survey showing an exceedance. Pacific Connector shall confirm compliance with the above requirement by filing a second noise survey with the Secretary no later than 60 days after it installs the additional noise controls.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Jordan Cove Energy Project L.P.
Pacific Connector Gas Pipeline, LP

Docket Nos. CP17-495-000
CP17-494-000

(Issued May 22, 2020)

GLICK, Commissioner, *dissenting*:

1. I dissent from today's order because it violates both the Natural Gas Act¹ (NGA) and the National Environmental Policy Act² (NEPA). Rather than wrestling with the Project's³ significant adverse impacts, today's order makes clear that the Commission will not allow these impacts to get in the way of its outcome-oriented desire to approve the Project.⁴

2. As an initial matter, the Commission continues to treat climate change differently than all other environmental impacts. The Commission steadfastly refuses to assess whether the impact of the Project's greenhouse gas (GHG) emissions on climate change is significant, even though it quantifies the GHG emissions caused by the Project's construction and operation.⁵ That refusal to assess the significance of the Project's contribution to the harm caused by climate change is what allows the Commission to perfunctorily conclude that "the environmental impacts associated with the Project are

¹ 15 U.S.C. §§ 717b, 717f (2018).

² National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.*

³ Today's order denies rehearing and motions for stay of the Commission's order authorizing both the Jordan Cove LNG export terminal (LNG Terminal) pursuant to NGA section 3, 15 U.S.C. § 717b (2018), and the Pacific Connector interstate natural gas pipeline (Pipeline) pursuant to NGA section 7, *id.* § 717f. I will refer to these two projects collectively as the Project.

⁴ *Jordan Cove Energy Project L.P.*, 171 FERC ¶ 61,136, PP 245, 253 (2020) (Rehearing Order); *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202, at P 262 (2020) (Certificate Order); Final Environmental Impact Statement for the Jordan Cove Project at 4-850-4-851 (EIS).

⁵ Certificate Order, 170 FERC ¶ 61,202 at P 259; EIS at Tables 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1 & 4.12.1.4-2.

“acceptable”⁶ and, as a result, conclude that the Project satisfies the NGA’s public interest standards.⁷ Claiming that a project’s environmental impacts are acceptable while at the same time refusing to assess the significance of the project’s impact on the most important environmental issue of our time is not reasoned decisionmaking.

3. Moreover, the Commission’s public interest analysis still does not adequately wrestle with the Project’s adverse environmental impacts. The Project will significantly and adversely affect several threatened and endangered species, and historic properties, and it will limit the supply of short-term housing near the Project. It will also cause elevated noise levels during construction and impair the visual character of the local community. Although the Commission recites those adverse impacts, at no point does it explain how it considered them in making its public interest determination or why it finds that the Project satisfies the relevant public interest standards notwithstanding those substantial impacts. Simply asserting that the Project is in the public interest without any discussion why is not reasoned decisionmaking.

4. It is also important to briefly mention landowners. The underlying order approved a significant change to the route of the pipeline, taking it across new properties and affecting new landowners. Recognizing that this was a possibility early on, those landowners intervened in the proceeding. And following the underlying order, they filed a rehearing request. The Commission rejected this rehearing request for two reasons. First, as the Commission notes, the request was received at 7:54 p.m. Eastern Time (4:54 p.m. Pacific Time) on April 20, the last day to seek rehearing of that underlying order. Under the Commission’s regulations, filings received after 5:00 p.m. Eastern Time are deemed filed the next day.⁸ Second, the rehearing request did not contain a detailed set of arguments as is also required by our regulations. As a result, today’s order leaves these landowners with no option to pursue judicial review and leaves this proceeding with no entity capable of fully representing their interests. Under those circumstances

⁶ Rehearing Order, 171 FERC ¶ 61,136 at PP 65-66; Certificate Order, 170 FERC ¶ 61,202 at P 294; EIS at ES-19. *But see* Certificate Order, 169 FERC ¶ 61,131 at PP 155, 220-223, 237, 242, 253, 256 (noting that the environmental impacts of the Project would be significant with respect to several federally listed threatened and endangered species, visual character in the vicinity of the LNG Terminal, short-term housing in Coos County, historic properties along the Pipeline route, and noise levels in Coos County).

⁷ Rehearing Order, 171 FERC ¶ 61,136 at PP 65-66; Certificate Order, 170 FERC ¶ 61,202 at P 294.

⁸ The Commission’s business hours are “from 8:30 a.m. to 5:00 p.m.,” and filings made after 5:00 p.m. will be considered filed on the next regular business day. *See* 18 C.F.R. §§ 375.101(c), 2001(a)(2) (2019).

and given the considerable issues at stake—as a result of underlying order, their property is now subject to condemnation—I would have waived the relevant regulations for good cause, rather than effectively snuffing any chance they may have to vindicate their rights on judicial review. We’ve heard a lot recently about how the Commission is willing to bend over backwards to accommodate landowners. Except we never actually see it.

- **The Commission’s Public Interest Determinations Are Not the Product of Reasoned Decisionmaking**

5. The NGA’s regulation of LNG import and export facilities “implicate[s] a tangled web of regulatory processes” split between the U.S. Department of Energy (DOE) and the Commission.⁹ The NGA establishes a general presumption favoring the import and export of LNG unless there is an affirmative finding that the import or export “will not be consistent with the public interest.”¹⁰ Section 3 of the NGA provides for two independent public interest determinations: One regarding the import or export of LNG itself and one regarding the facilities used for that import or export.

6. DOE determines whether the import or export of LNG is consistent with the public interest, with transactions among free trade countries legislatively deemed to be “consistent with the public interest.”¹¹ The Commission evaluates whether “an application for the siting, construction, expansion, or operation of an LNG terminal” is itself consistent with the public interest.¹² Pursuant to that authority, the Commission

⁹ *Sierra Club v. FERC*, 827 F.3d 36, 40 (D.C. Cir. 2016) (*Freeport*).

¹⁰ 15 U.S.C. § 717b(a); see *EarthReports, Inc. v. FERC*, 828 F.3d 949, 953 (D.C. Cir. 2016) (citing *W. Va. Pub. Servs. Comm’n v. Dep’t of Energy*, 681 F.2d 847, 856 (D.C. Cir. 1982) (“NGA [section] 3, unlike [section] 7, ‘sets out a general presumption favoring such authorization.’”)). Under section 7 of the NGA, the Commission approves a proposed pipeline if it is shown to be consistent with the public interest, while under section 3, the Commission approves a proposed LNG import or export facility unless it is shown to be inconsistent with the public interest. Compare 15 U.S.C. § 717b(a) with *id.* § 717f(a), (e).

¹¹ 15 U.S.C. § 717b(c). The courts have explained that, because the authority to authorize the LNG exports rests with DOE, NEPA does not require the Commission to consider the upstream or downstream GHG emissions that may be indirect effects of the export itself when determining whether the related LNG export facility satisfies section 3 of the NGA. See *Freeport*, 827 F.3d at 46-47; see also *Sierra Club v. FERC*, 867 F.3d 1357, 1373 (D.C. Cir. 2017) (*Sabal Trail*) (discussing *Freeport*). Nevertheless, NEPA requires that the Commission consider the direct GHG emissions associated with a proposed LNG export facility. See *Freeport*, 827 F.3d at 41, 46.

¹² 15 U.S.C. § 717b(e). In 1977, Congress transferred the regulatory functions of

must approve a proposed LNG facility unless the record shows that the facility would be inconsistent with the public interest.¹³ In addition, section 7 of the NGA requires the Commission to determine whether the pipeline component of the Project is required by the public convenience and necessity,¹⁴ a standard the courts have likened to the public interest standard.¹⁵ Today's order fails to satisfy these standard in multiple respects.

○ **The Commission's Public Interest Determination Does Not Adequately Consider Climate Change**

7. In making its public interest determination, the Commission examines a proposed facility's impact on the environment and public safety. A facility's impact on climate change is one of the environmental impacts that must be part of a public interest determination under the NGA.¹⁶ Nevertheless, the Commission maintains that it need not consider whether the Project's contribution to climate change is significant in this order because it lacks a means to do so—or at least so it claims.¹⁷ However, the most troubling part of the Commission's rationale is what comes next. Based on this alleged inability to assess the significance of the Project's impact on climate change, the Commission still summarily concludes that all of the Project's environmental impacts would be

NGA section 3 to DOE. DOE, however, subsequently delegated to the Commission authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal, while retaining the authority to determine whether the import or export of LNG to non-free trade countries is in the public interest. *See EarthReports*, 828 F.3d at 952-53.

¹³ *See Freeport*, 827 F.3d at 40-41.

¹⁴ 15 U.S.C. § 717f (2018).

¹⁵ *E.g., Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959) (holding that the NGA requires the Commission to consider “all factors bearing on the public interest”).

¹⁶ *See Sabal Trail*, 867 F.3d at 1373 (explaining that the Commission must consider a pipeline's direct and indirect GHG emissions because the Commission may “deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment”); *see also Atl. Ref. Co.*, 360 U.S. 378 (holding that the NGA requires the Commission to consider “all factors bearing on the public interest”).

¹⁷ Certificate Order, 170 FERC ¶ 61,202 at P 262; EIS at 4-4-850.

“acceptable.”¹⁸ Think about that. With that “logical hopscotch,”¹⁹ the Commission is simultaneously stating that it cannot assess the significance of the Project’s impact on climate change²⁰ while concluding that all environmental impacts are acceptable to the public interest.²¹ That is unreasoned and an abdication of our responsibility to give climate change the “hard look” that the law demands.²²

8. It also means that the Project’s impact on climate change does not play a meaningful role in the Commission’s public interest determination, no matter how often the Commission assures us that it does. Using the approach in today’s order, the Commission will always conclude that a project will not have a significant environmental impact irrespective of that project’s actual GHG emissions or those emissions’ impact on climate change. If the Commission’s conclusion will not change no matter how many GHG emissions a project causes, those emissions cannot, as a logical matter, play a meaningful role in the Commission’s public interest determination. A public interest determination that systematically excludes the most important environmental consideration of our time is contrary to law, arbitrary and capricious, and not the product of reasoned decisionmaking.

¹⁸ Rehearing Order, 171 FERC ¶ 61,136 at PP 65-66; Certificate Order, 170 FERC ¶ 61,202 at P 294.

¹⁹ NRDC Rehearing Request at 42.

²⁰ Certificate Order, 170 FERC ¶ 61,202 at P 262; EIS at 4-4-850 (“[W]e are unable to determine the significance of the Project’s contribution to climate change.”).

²¹ Rehearing Order, 171 FERC ¶ 61,136 at PP 65-66; Certificate Order, 170 FERC ¶ 61,202 at P 294 (stating that the environmental impacts are acceptable and further concluding that the Jordan Cove LNG Terminal is not inconsistent with the public interest and that the Pacific Connector Pipeline is required by the public convenience and necessity).

²² See, e.g., *Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1322 (D.C. Cir. 2015) (explaining that agencies cannot overlook a single environmental consequence if it is even “arguably significant”); see also *Michigan v. EPA*, 135 S. Ct. 2699, 2706 (2015) (“Not only must an agency’s decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.” (internal quotation marks omitted)); *Motor Vehicle Mfrs. Ass’n, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (explaining that agency action is “arbitrary and capricious if the agency has . . . entirely failed to consider an important aspect of the problem, [or] offered an explanation for its decision that runs counter to the evidence before the agency”).

9. The failure to meaningfully consider the Project's GHG emissions is all-the-more indefensible given the volume of GHG emissions at issue in this proceeding. The Project will directly release over 2 million tons of GHG emissions per year.²³ The Commission recognizes that climate change is “driven by accumulation of GHG in the atmosphere through combustion of fossil fuels (coal, petroleum, and natural gas), combined with agriculture, clearing of forests, and other natural sources”²⁴ and that the “GHG emissions from the construction and operation of the projects will contribute incrementally to climate change.”²⁵ In light of this undisputed relationship between anthropogenic GHG emissions and climate change, the Commission must carefully consider the Project's contribution to climate change when determining whether the Project is consistent with the public interest—a task that it entirely fails to accomplish in today's order.

○ **The Commission's Consideration of the Project's Other Adverse Impacts Is Also Arbitrary and Capricious**

10. In addition, the Project will have a significant adverse effect on more than 20 Federally-listed threatened and endangered species—including whale, fish, and bird species²⁶—as well as historic properties along the Pipeline route²⁷ and short-term housing in Coos County.²⁸ It will also cause harmful noise levels in the area²⁹ and impair the

²³ Certificate Order, 170 FERC ¶ 61,202 at P 259; EIS at Tables 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1 & 4.12.1.4-2 (estimating the Project's direct and indirect emissions from construction and operation, including vessel traffic).

²⁴ EIS at 4-849.

²⁵ Certificate Order, 170 FERC ¶ 61,202 at P 262.

²⁶ *Id.* PP 220-223.

²⁷ *Id.* P 253; EIS at 4-683. Following the completion of some land surveys, the Commission states that at least 20 sites along the Pipeline route are eligible historic properties and cannot be avoided. EIS at 5-9 (“Constructing and operating the Project would have adverse effects on historic properties under Section 106 of the [National Historic Preservation Act].”).

²⁸ Certificate Order, 170 FERC ¶ 61,202 at P 242; EIS at 4-631–4-635 (finding that the construction of the Project may have significant effects on short-term housing in Coos County, Oregon, which could include potential displacement of existing and potential residents, as well as tourists and other visitors); *see also* Certificate Order, 170 FERC ¶ 61,202 at P 279 (further concluding that these impacts would more acutely impact low-income households).

²⁹ EIS at 4-717–4-721. The Commission finds that pile driving associated with

visual character of the surrounding community.³⁰ Although the Commission discloses the adverse impacts throughout the EIS and mentions them in today's order,³¹ it does not appear that they factor meaningfully, if at all, into the Commission's public interest analysis. Simply deeming those adverse impacts to be "acceptable" without any explanation of how that conclusory finding supports the Commission's public interest determination is a far cry from reasoned decisionmaking.³²

11. Rehearing parties make this very point, arguing the Commission's public interest determinations fails to account for adverse environmental impacts.³³ The Commission's only response is to regurgitate its usual boilerplate that "balancing of adverse impacts and public benefits is an economic test, not an environmental analysis" and that it will consider environmental impacts if the Project's benefits outweigh the adverse effect on economic interests.³⁴ That response certainly does nothing to clarify *how* environmental impacts are considered in the Commission's public interest determination, if they are considered at all.

12. The Commission also points us to a series statements about the purported need for the Project³⁵ and its public benefits, assuring us that, as a result, all environmental impact

LNG Terminal construction occurring 20 hours per day for two years would result in a significant impact on the local community.

³⁰ Certificate Order, 170 FERC ¶ 61,202 at P 237.

³¹ *Id.* PP 155, 220-223, 237, 242, 253, 256 (noting that the environmental impacts of the Project would be significant with respect to several federal-listed threatened and endangered species, visual character in the vicinity of the LNG Terminal, short-term housing in Coos County, historic properties along the Pipeline route, and noise levels in Coos County).

³² That is particularly important when it comes to the Commission's section 7 authorization of the Pipeline because it conveys eminent domain authority, 15 U.S.C. § 717f(h) (2018), and roughly a quarter of the private landowners have not reached easement agreements, meaning that, upon issuance of the certificate, they may be subject to condemnation proceedings.

³³ Sierra Club Rehearing Request at 22-24; NRDC Rehearing Request at 36-43; State of Oregon Rehearing Request at 29, 46; McCaffree Rehearing Request at 10.

³⁴ Rehearing Order, 171 FERC ¶ 61,136 at P 64; *see also* Certificate Order, 170 FERC ¶ 61,202 at P 92.

³⁵ Rehearing Order, 171 FERC ¶ 61,136 at P 65. *But see infra* PP 13-19.

are “acceptable.”³⁶ But that again does not explain how the Commission considered those impacts or why the benefits rendered them “acceptable.”³⁷ Taken seriously, the Commission’s rationale, and the absence of any actual explanation for why the Project satisfies the relevant public interest standards despite the significant environmental impacts, suggests that environmental impacts cannot meaningfully factor into the Commission’s application of the public interest. Indeed, if serious impacts are on more than 20 threatened and endangered species are not even worth a mention in the Commission’s public interest analysis, one cannot help but doubt that they play a role in the Commission’s decisionmaking process. The failure to explain how the Commission considered those adverse impacts in making its decision would seem to conflict with the Supreme Court’s guidance that it must consider “all factors bearing on the public interest,”³⁸ not to mention basic principles of reasoned decisionmaking.

- **This Record Demanded a More Thorough Review of the Need for the Pipeline**

13. In addition to the above failures, the Commission finds that Pacific Connector Pipeline is needed based solely on its agreement with Jordan Cove, an affiliate of the same corporate parent, Pembina. As I have previously explained, precedent agreements between affiliates—e.g., a pipeline developer and a shipper that are part of the same larger enterprise—are not necessarily sufficient to show that a proposed project is “needed” for the purposes of a certificate of public convenience and necessity under section 7 of the NGA.³⁹ That is because, unlike ordinary precedent agreements, agreements between affiliates are not necessarily the product of arms-length negotiations and may reflect the best interests of their shared corporate parent, without indicating a genuine need for the pipeline. That does not, however, mean that precedent agreements between affiliates are irrelevant when evaluating the need for proposed pipeline. Instead, the absence of arms-length negotiations underscores the importance of considering all

³⁶ *Id.*

³⁷ *Cf. Am. Tel. & Tel. Co. v. FCC*, 974 F.2d 1351, 1355 (D.C. Cir. 1992) (holding that “conclusory assertions” regarding hard issues are not the basis of reasoned decisionmaking).

³⁸ *See Atl. Ref. Co.*, 360 U.S. at 391 (holding that the NGA requires the Commission to consider “all factors bearing on the public interest”); *see also Sabal Trail*, 867 F.3d at 1373 (explaining that the Commission may “deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment”).

³⁹ *See generally Spire STL Pipeline LLC*, 169 FERC ¶ 61,134 (2019) (Glick, Comm’r, dissenting at P 13).

evidence that may bear on the need for the proposed pipeline, which is, after all, exactly what the Commission's 1999 Certificate Policy Statement contemplates.⁴⁰

14. A proposed pipeline that will serve as an LNG export facility's sole source of supply can often make the need showing without too much difficulty. After all, as the Commission has previously explained, an LNG export facility cannot go forward without a source of natural gas. But where there is serious doubt about whether the export facility will actually be developed, the Commission must both take a harder look at whether putative export facility is sufficient to establish a need for the pipeline or support a finding that the project is required by the public convenience and necessity. After all, a section 7 certificate conveys the authority to exercise eminent domain, and it would be unconscionable for this Commission to permit a developer to seize private land for a project that has little chance of ever being completed.

15. This case demands that sort of hard look. The evidence suggests a number of reasons to doubt whether the Project will ever be developed. For one thing, the LNG market was on the decline when the Commission issued the certificate order and the intervening months have not provided much reason to hope that things will turn around.⁴¹ A global downturn in the market, coupled with uncertain prospects in the months and years ahead, ought to compel the Commission to at least examine the assumption that the LNG export facility will be built and create the only conceivable need for the pipeline. That is especially so here because, unlike some of the LNG export facilities that the Commission has certificated over the last year, Jordan Cove does not have any contracts for its putative LNG output.⁴² Moreover, the state of Oregon has consistently raised concerns about Project and its ability to satisfy various outstanding permitting

⁴⁰ See Certification of New Interstate Nat. Gas Pipeline Facilities, 88 FERC ¶ 61,227, 61,747-48 (1999) (1999 Certificate Policy Statement).

⁴¹ NRDC Rehearing Request at 32 (citing Irina Slay, *www.oilprice.com*, *Giant LNG Projects Face Coronavirus Death or Delay* (Mar. 17, 2020), <https://oilprice.com/Energy/Natural-Gas/Giant-LNG-Projects-Face-Coronavirus-Death-OrDelay.html> (noting the glut in LNG supply and the instabilities in the LNG market given trade issues and coronavirus)).

⁴² Cf. Venture Global LNG, *PGNiG and Venture Global LNG sign agreement for the sales and purchase of LNG from the USA*, <https://venturegloballng.com/press/pgnig-and-venture-global-lng-sign-agreement-for-the-sales-and-purchase-of-lng-from-the-usa/> (last visited May 21, 2020). This is not to suggest that such contracts are a necessary prerequisite to a finding of need for a section 7 facility. But, where the record otherwise suggests concerns about the likelihood a project will be developed, the absence of any contracts only heightens those concerns.

requirements, including section 401 of the Clean Water Act,⁴³ state air quality permits⁴⁴—not to mention the outstanding questions regarding the Coastal Zone Management Authorization (which Oregon has already rejected)⁴⁵ and the pending requests for Forest Service authorization to cross federal lands.⁴⁶ Finally, Jordan Cove has been attempting to develop this Project for roughly 15 years at this point. While not dispositive on its own, the long and winding road that the project has taken to date ought to cause the Commission to exercise a little caution before assuming the next step will clear the way for its eventual development, meaning that the time has come to permit Jordan Cove to take private property.⁴⁷

⁴³ See also Oregon Entities Rehearing Request at 15-18 (discussing the history of Jordan Cove’s Clean Water Act section 401 and section 404 applications).

⁴⁴ *Id.* at 33 (“In its [F]EIS, FERC asserts that operational emissions from the proposed new sources will remain below thresholds requiring a PSD Permit. . . . That conclusion is incorrect. [The Oregon Department of Environmental Quality] has not yet determined whether the operation of the proposed facilities will require a major new source review and PSD permit or a minor PSD permit, because the applicants have indicated continuing uncertainty about the exact nature of the liquefaction facilities and the Malin compressor station.”).

⁴⁵ *Id.* at 25-26.

⁴⁶ Rehearing Order, 171 FERC ¶ 61,136 at P 299.

⁴⁷ These points take on added significance given the Commission’s prior denial of the Project based on its failure to show it was needed. As the Natural Resources Defense Council points out in its request for rehearing, the only material change between the application that the Commission rejected in 2016 and the one it accepted in 2020 was the single affiliated precedent agreement. See NRDC Rehearing Request at 13-16 (citing, among others, *FCC v. Fox Television Stations, Inc.*, 566 U.S. 502 (2009) and *Organized Vill. of Kake v. U.S. Dep’t of Agric.*, 795 F.3d 956, 966-70 (9th Cir. 2015) (en banc)). In denying the prior application in 2016, the Commission noted that the project developer had “failed to make any significant showing of demand,” even though “submittal of precedent agreements was but one indicia of demand that an applicant could file to demonstrate the public benefits of its project.” *Jordan Cove Energy Project, L.P.*, 157 FERC ¶ 61,194, at P 23 (2016). Especially in light of that prior finding of a complete absence of evidence indicating need and the 1999 Policy Statement’s contemplation that the Commission would consider all relevant evidence bearing on need for a pipeline, reasoned decisionmaking requires the Commission to do more than simply point to the agreement among affiliates and call it a day.

16. On their own, none of those factors would necessarily require a hard look at the LNG facility's prospects as part of the Commission's section 7 review. But, together, they cannot be ignored. There is simply too much uncertainty in this record to justify the Commission's finding that the project is needed, that it is required by the public convenience, or that conveying the authority to exercise eminent domain is appropriate at this time. At the very least, the Commission should stay the operation of the certificate, and, with it, the authority to exercise eminent domain, pending a resolution of the numerous pending state proceedings or a showing that Jordan Cove is prepared to actually begin developing the Project.

17. Unfortunately, today's order doubles down on the conclusion that the single precedent agreement is a sufficient basis—and the sole basis—for finding that the pipeline project is needed and required by the public convenience and necessity.⁴⁸ The Commission's 1999 Certificate Policy statement, however, contemplates more holistic inquiry that weighs the extent of the need for a project against its adverse impacts. Today's order, however, makes no effort to discuss the considerable uncertainty clouding the need for the Project or how that uncertainty factors into its weighing of the adverse impacts, including the exercise of eminent domain⁴⁹ and the effects on environmental and cultural resources that lie along the pipeline's 229-mile path.⁵⁰ Especially given the Commission's increasingly frequent and fervent assurances of its concern for landowners, one would have thought that the Commission would have at least taken into account the considerable uncertainty surrounding the project before enabling the use of eminent domain for a project that may never be built. The absence of any such discussion is hard to square with that purported concern.

⁴⁸ See Rehearing Order, 171 FERC ¶ 61,136 at P 35, 44. In so doing, the Commission is quick to point to D.C. Circuit cases that have upheld its reliance on precedent agreements, including a few that have done so when it comes to agreements among affiliates. But, as I have previously explained, the Court has never held that such agreements are always a sufficient condition to show the need for a proposed pipeline—the position the Commission takes in today's order. See generally *Spire STL Pipeline*, 169 FERC ¶ 61,134 (Glick, Comm'r, dissenting at PP 15-16) (discussing the D.C. Circuit's jurisprudence on precedent agreements). Instead, the court has recognized that contrary record evidence may make precedent agreements an insufficient basis on which to find a need for the new pipeline. *Id.* PP 15-16.

⁴⁹ 1999 Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,749 (“The strength of the benefit showing will need to be proportional to the applicant's proposed exercise of eminent domain procedures.”).

⁵⁰ See Rehearing Order, 171 FERC ¶ 61,136 at P 7.

- **The Commission Fails to Satisfy Its Obligations under NEPA**

18. The Commission’s NEPA analysis of the Project’s GHG emissions is similarly flawed. As an initial matter, in order to evaluate the environmental consequences of the Project under NEPA, the Commission must consider the harm caused by its GHG emissions and “evaluate the ‘incremental impact’ that those emissions will have on climate change or the environment more generally.”⁵¹ As noted, the operation of the Project will emit more than 2 million tons of GHG emissions per year.⁵² Although quantifying the Project’s GHG emissions is a necessary step toward meeting the Commission’s NEPA obligations, listing the volume of emissions alone is insufficient.⁵³ Identifying the consequences that those emissions will have for climate change is essential if NEPA is to play the disclosure and good government roles for which it was designed. The Supreme Court has explained that NEPA’s purpose is to “ensure[] that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts” and to “guarantee[] that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.”⁵⁴ It is

⁵¹ *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216 (9th Cir. 2008); *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 51 (D.D.C. 2019) (explaining that the agency was required to “provide the information necessary for the public and agency decisionmakers to understand the degree to which [its] decisions at issue would contribute” to the “impacts of climate change in the state, the region, and across the country”).

⁵² Certificate Order, 170 FERC ¶ 61,202 at P 258; EIS at Tables 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1 & 4.12.1.4-2 (estimating the Project’s direct and indirect emissions from the Project’s construction and operation, including vessel traffic associated with the LNG Terminal).

⁵³ *See Ctr. for Biological Diversity*, 538 F.3d at 1216 (“While the [environmental document] quantifies the expected amount of CO₂ emitted . . . , it does not evaluate the ‘incremental impact’ that these emissions will have on climate change or on the environment more generally.”); *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 995 (9th Cir. 2004) (“A calculation of the total number of acres to be harvested in the watershed is a necessary component . . . , but it is not a sufficient description of the actual environmental effects that can be expected from logging those acres.”).

⁵⁴ *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004) (citing *Robertson v. Methow Valley Citizens Coun.*, 490 U.S. 332, 349 (1989)).

hard to see how hiding the ball by refusing to assess the significance of the Project's climate impacts is consistent with either of those purposes.

19. In addition, under NEPA, a finding of significance informs the Commission's inquiry into potential ways of mitigating environmental impacts.⁵⁵ An environmental review document must "contain a detailed discussion of possible mitigation measures" to address adverse environmental impacts.⁵⁶ "Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects" of a project, meaning that an examination of possible mitigation measures is necessary to ensure that the agency has taken a "hard look" at the environmental consequences of the action at issue.⁵⁷

20. The Commission responds that it need not determine whether the Project's contribution to climate change is significant because "[t]here is no universally accepted methodology" for assessing the harms caused by the Project's contribution to climate change.⁵⁸ But the lack of a single consensus methodology does not prevent the Commission from adopting *a* methodology, even if it is not universally accepted. The Commission could, for example, select one methodology to inform its reasoning while also disclosing its potential limitations or the Commission could employ multiple methodologies to identify a range of potential impacts on climate change. In refusing to assess a project's climate impacts without a perfect model for doing so, the Commission sets a standard for its climate analysis that is higher than it requires for any other environmental impact.

21. Furthermore, even without any formal tool or methodology, the Commission can consider all factors and determine, quantitatively or qualitatively, whether the Project's

⁵⁵ 40 C.F.R. § 1502.16 (2019) (requiring an implementing agency to form a "scientific and analytic basis for the comparisons" of the environmental consequences of its action in its environmental review, which "shall include discussions of . . . [d]irect effects and their significance.").

⁵⁶ *Robertson*, 490 U.S. at 351.

⁵⁷ *Id.* at 352.

⁵⁸ EIS at 4-850 (stating that "there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to Project's incremental contribution to GHGs" and "[w]ithout the ability to determine discrete resource impacts, we are unable to determine the significance of the Project's contribution to climate change."); *see also* Certificate Order, 170 FERC ¶ 61,202 at P 262 ("The Commission has also previously concluded it could not determine whether a project's contribution to climate change would be significant.").

GHG emissions will have a significant impact on climate change. After all, that is precisely what the Commission does in other aspects of its environmental review, where the Commission makes several significance determinations based on subjective assessments of the extent of the Project's impact on the environment.⁵⁹ The Commission's refusal to similarly analyze the Project's impact on climate change is arbitrary and capricious.

22. The Commission also suggests that it cannot determine the significance GHG emissions because it “has no way to . . . assess how that amount contributes to climate change” without a way to “link physical effects caused by the projects’ GHG emissions.” Nonsense. The Commission acknowledges that every single ton of GHG emissions, including those from the Project,⁶⁰ contributes to climate change, which causes discrete adverse effects across the globe and in the Project region.⁶¹ That is more than enough of a basis to evaluate the effects of the Project's GHG emissions on climate change. After all, even the recent Council on Environmental Quality draft NEPA guidance on consideration of GHG emissions—hardly a radical environmental manifesto—recognizes that the quantity of GHG emissions “may be used as a proxy for assessing potential climate effects.”⁶² And yet, contrary to even that guidance, today's order insists that a quantity of GHG emissions cannot be used to tell us anything about the Project's effects

⁵⁹ See, e.g., EIS at 4-184, 4-619–4-620, 4-645 (concluding that there will be no significant impact on vegetation, Tribal subsistence practices, and marine vessel traffic). The Commission makes these determinations without any disclosing any “metric for assessing the significance of the environmental impact on these resources,” contrary to the Commission's claim in today's order, see Rehearing Order, 171 FERC ¶ 61,136 at P 245.

⁶⁰ Certificate Order, 170 FERC ¶ 61,202 at P 262.

⁶¹ EIS at 4-701, 4-706, 4-848–4-849 (finding that the Project results in 2 million tons of GHGs annually, that climate change is “driven by accumulation of GHG in the atmosphere,” and that the specific climate change impacts *in the Project region* with a high or very high level of confidence include increase in stream temperatures reducing salmon habitat, more frequent winter storms, warming trends that exacerbate snowpack loss increasing the risk for insect infestation and wildfires, longer periods between rainfall leading to depletion of aquifers and strain on surface water resources, and increases in evaporation and plant water loss rates resulting in saltwater intrusion into shallow aquifers).

⁶² Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, 84 Fed. Reg. 30,097, 30,098 (2019) (“A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.”).

on climate change or the significance thereof.⁶³ That proposition makes sense only if you do not believe that there is a direct relationship between GHG emissions and climate change.

23. In any case, as noted, the Commission does not apply this same standard when assessing the significance of the Project's other environmental impacts. For example, consider how the Commission discusses the Project's impact on upland vegetation, particularly forested land. It finds that the forested land affected by the Project supports "multiple interacting layers of organisms that include plants, animals, fungi, and bacteria"⁶⁴ and that the loss of an acre of forested land causes adverse effects on the supported organisms. In evaluating whether the Project's impact on forested land is significant, the Commission relies on acreage as the proxy for actual adverse environmental impacts, and concludes that the 2,750 acres of lost forested land would not be significant.⁶⁵ The Commission does not attempt to link those specific 2,750 acres of forested land to direct or quantifiable adverse effects for the purpose of assessing significance. Yet, this is exactly the standard the Commission suggests it must meet to assess the significance the quantity of GHG emissions on climate change. The Commission's insistence on applying a dramatically higher standard before it can assess the Project's climate change impacts is arbitrary and capricious.

24. In addition, the Commission has repeatedly justified its refusal to consider the significance of a Project's impact on climate change on the basis that it lacks "any GHG emission reduction goals established either at the federal level or by the [state]" with which to compare the Project's emissions.⁶⁶ Oregon, however, has an established "GHG

⁶³ Rehearing Order, 171 FERC ¶ 61,136 at P 245 ("To assess a project's effect on climate change, the Commission can only quantify the amount of project emissions, but it has no way to then assess how that amount contributes to climate change.").

⁶⁴ EIS at 4-150.

⁶⁵ *Id.* at 4-184.

⁶⁶ *See, e.g., Alaska Gasline Dev. Corp.*, 171 FERC ¶ 61,134, at P 215 (2020) (Alaska LNG Certificate Order) ("[W]e are unaware of any GHG emission reduction goals established either at the federal level or by the State of Alaska Without either the ability to determine discrete resource impacts or an established target to compare GHG emissions against, the final EIS concludes that it cannot determine the significance of the project's contribution to climate change."); Alaska LNG Project Final Environmental Impact Statement, Docket No. CP17-178-000, at 4-1222 (Mar. 6, 2020) (Alaska LNG EIS); Rio Grande LNG Final Environmental Impact Statement, Docket No. CP16-454-000, at 4-482 (Apr. 26, 2019) (asserting the Commission has "not been able to find any GHG emission reduction goals established either at the federal level or by the [state]. Without either the ability to determine discrete resource impacts or an established

emission reduction goal[]” in the form a legislative goal of reducing GHG emissions 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050.⁶⁷ As NRDC noted on rehearing, the emissions from the Project would represent an eighth of the entire state-wide emissions allowable under the state’s 2050 goal.⁶⁸ That is exactly the type of significance analysis that the Commission has been suggesting it could perform in order after order over the past couple of years.

25. Recognizing that, under its own standard, it might have to finally consider climate change, the Commission moves the goal posts once again, this time suggesting that Oregon’s goals cannot inform a significance determination because they are aspirational and the legislature “did not create any additional regulatory authority to meet its goals.”⁶⁹ More nonsense. The issue before us is whether the emissions from the Project are significant, not whether the state has the authority to enforce its goals. A comparison with state targets is relevant because it provides the context that the Commission has repeatedly claimed it needs to assess significance. The enforceability of those standards is irrelevant for the purposes of that exercise.

26. In any case, as noted, the Commission has repeatedly, including again today, suggested that these “goals” or “targets” are what it needs in order to assess the significance of a project’s GHG emissions.⁷⁰ It is hard to imagine a more arbitrary and capricious action than an agency excusing itself from considering a Project’s impact on climate change because there is no goal or target to compare the emissions with and then *on the same day*, when presented with such a goal, asserting that it cannot use that goal or

target to compare GHG emissions against, we are unable to determine the significance of the Project’s contribution to climate change”).

⁶⁷ See Certificate Order, 170 FERC ¶ 61,202 at P 260; NRDC Rehearing Request at 65-66; Sierra Club Rehearing Request at 65; State of Oregon Rehearing Request at 36.

⁶⁸ NRDC Rehearing Request at 66; see Certificate Order, 170 FERC ¶ 61,202 at P 261 (recognizing the state’s goals and acknowledging that the Project’s GHG emissions would “represent 4.2 percent and 15.3 percent of Oregon’s 2020 and 2050 GHG goals, respectively”).

⁶⁹ Rehearing Order, 171 FERC ¶ 61,136 at P 253.

⁷⁰ See, e.g., Alaska LNG Certificate Order, 171 FERC ¶ 61,134 at P 215 (“[W]e are unaware of any GHG emission reduction *goals* established either at the federal level or by the State of Alaska Without either the ability to determine discrete resource impacts or an established *target* to compare GHG emissions against, the final EIS concludes that it cannot determine the significance of the project’s contribution to climate change.” (emphasis added)); Alaska LNG EIS, Docket No. CP17-178-000, at 4-1222.

target because, in the Commission’s judgment, the state lacks adequate to realize that goal.

27. It is clear what is going on. The Commission will say whatever it needs to in order to avoid having to evaluate whether a project’s GHG emissions are significant or whether the impact of those emissions on climate change is itself significant. For the better part of the last two years, the Commission has made excuse after excuse for why it does not need to consider climate change in its decisionmaking process. Today’s contradictory LNG orders are just a particularly clear example of the Commission’s serial attempts to duck its responsibilities. That will continue until a court steps in to set things right.

28. In any event, even if the Commission were to find that the Project’s GHG emissions are significant, that is not the end of the analysis. Instead, as noted above, the Commission could blunt those impacts through mitigation—as the Commission often does with regard to other environmental impacts. The Supreme Court has held that an environmental review must “contain a detailed discussion of possible mitigation measures” to address adverse environmental impacts.⁷¹ As noted above, “[w]ithout such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.”⁷²

29. Consistent with this obligation, the EIS discusses mitigation measures to ensure that the Project’s adverse environmental impacts (other than its GHG emissions) are reduced to less-than-significant levels.⁷³ And throughout today’s order, the Commissions uses its broad conditioning authority under section 3 and section 7 of the NGA⁷⁴ to implement these mitigation measures, which support its public interest finding.⁷⁵ For

⁷¹ *Robertson*, 490 U.S. at 351.

⁷² *Id.* at 351-52; *see also* 40 C.F.R. § 1508.20 (2019) (defining mitigation); *id.* § 1508.25 (including in the scope of an environmental impact statement mitigation measures).

⁷³ *See, e.g.*, EIS at 4-656 (discussing mitigation required by the Commission to address motor vehicle traffic impacts from the Project).

⁷⁴ 15 U.S.C. § 717b(e)(3)(A); *id.* § 717f(e); Certificate Order, 170 FERC ¶ 61,202 at P 293 (“[T]he Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources . . . , including authority to impose any additional measures deemed necessary.”).

⁷⁵ *See* Certificate Order, 170 FERC ¶ 61,202 at P 293 (explaining that the environmental conditions ensure that the Project’s environmental impacts are consistent

example, the Commission uses this broad conditioning authority to mitigate the impact on short-term housing in Coos County caused by the influx of workers during construction of the LNG Terminal and Pipeline. The Commission concludes that the influx of workers will not only create a short-term rental shortage during the peak tourist season, but this impact would be acutely felt by low-income households.⁷⁶ To mitigate this significant impact, the Commission requires Jordan Cove to designate a Construction Housing Coordinator to address these housing concerns. Despite this use of our conditioning authority to mitigate adverse impacts, the Project's climate impacts continue to be treated differently, as the Commission refuses to identify any potential climate mitigation measures or discuss how such measures might affect the magnitude of the Project's impact on climate change.

30. Finally, the Commission's refusal to seriously consider the significance of the impact of the Project's GHG emissions is even more mystifying because NEPA "does not dictate particular decisional outcomes."⁷⁷ NEPA "merely prohibits uninformed—rather than unwise—agency action."⁷⁸ The Commission could find that a project contributes significantly to climate change, but that it is nevertheless in the public interest because its benefits outweigh its adverse impacts, including on climate change. In other words, taking the matter seriously—and rigorously examining a project's impacts on climate change—does not necessarily prevent any of my colleagues from ultimately concluding that a project satisfies the relevant public interest standard.

For these reasons, I respectfully dissent.

Richard Glick
Commissioner

with those anticipated by the environmental analysis).

⁷⁶ *Id.* P 279.

⁷⁷ *Sierra Club v. U.S. Army Corps of Engineers*, 803 F.3d 31, 37 (D.C. Cir. 2015).

⁷⁸ *Id.* (quoting *Robertson*, 490 U.S. at 351).