IN THE UNITED STATES COURT OF APPEALS

FOR THE DISTRICT OF COLUMBIA CIRCUIT

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| STATE OF OREGON, acting by and through its DEPARTMENT OF ENVIRONMENTAL QUALITY, DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT, DEPARTMENT OF FISH AND WILDLIFE, AND DEPARTMENT OF ENERGY,<br><br>Petitioners,<br><br>v.<br><br>FEDERAL ENERGY REGULATORY COMMISSION,<br><br>Respondents. | U.S.C.A. No. 20-1161 (Control), 20-1198 |

**SECOND AMENDED PETITION FOR REVIEW**

Pursuant to Section 19(b) of the Natural Gas Act, 15 U.S.C. § 717r(b), and Federal Rule of Appellate Procedure 15(a), and Circuit Rule 15, the State of Oregon, acting by and through its Department of Environmental Quality, Department of Land Conservation and Development, Department of Fish and Wildlife, and Department of Energy, ("the State agencies") hereby petitions this Court to review and set aside the following orders of the Federal Energy Regulatory Commission (Commission):

1. Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP, "Order on Rehearing and Stay," FERC Docket Nos. CP17-494-001, CP17-495-001, 171 FERC ¶ 61,136 (May 22, 2020) (Rehearing Order, attached as



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Exhibit A);

2. Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP, "Order Granting Rehearings for Further Consideration," FERC Docket Nos. CP17-494-001, CP17-495-001, FERC Accession No. 20200518-3010 (May 18, 2020) (Tolling Order, attached as Exhibit B); and
3. Jordan Cove Energy Project L.P., Pacific Connector Gas Pipeline, LP, "Order Granting Authorizations under Sections 3 and 7 of the Natural Gas Act," FERC Docket Nos. CP17-494-000, CP17-495-000, 170 FERC ¶ 61,202 (Mar. 19, 2020) (Certificate Order, attached as Exhibit C).

The State agencies named above were intervenors in the Commission proceeding below. The State agencies also timely filed a request for rehearing of the Certificate Order, which was denied in the Rehearing Order. This Court has jurisdiction to review the Certificate Order pursuant to 15 U.S.C. § 717r(b). This petition for review is timely filed within 60 days of the denial of rehearing in accordance with 15 U.S.C. § 717r(b).

Respectfully submitted,

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## EXHIBITS

*A.* *Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP*, "Order on Rehearing and Stay," FERC Docket Nos. CP17-494-001, CP17-495-001, 171 FERC ¶ 61,136 (May 22, 2020).

*B.* *Jordan Cove Energy Project, L.P., Pacific Connector Gas Pipeline, LP*, "Order Granting Rehearings for Further Consideration," FERC Docket Nos. CP17-494-001, CP17-495-001, FERC Accession No. 20200518-3010 (May 18, 2020).

*C.* *Jordan Cove Energy Project L.P., Pacific Connector Gas Pipeline, LP*, "Order Granting Authorizations under Sections 3 and 7 of the Natural Gas Act," FERC Docket Nos. CP17-494-000, CP17-495-000, 170 FERC ¶ 61,202 (Mar. 19, 2020).

*D.* Service List of Federal Regulatory Commission proceedings CP17-494 and CP17-495.



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# EXHIBIT A

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. Docket Nos. CP17-495-001
Pacific Connector Gas Pipeline, LP 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 regulations[2] 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 7[4] 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 ($m^3$); 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 $m^3$ to 217,000 $m^3$;[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

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[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 $m^3$. 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

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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/$m^3$, 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

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[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

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[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.

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[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

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[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

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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

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[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

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[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 Connecter 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 in 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

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[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 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]

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[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]

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[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 shippers[97] 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 Oregon[98] 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

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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

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[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

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[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 find[118] 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]

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[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 Order[125] 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

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[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

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[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]

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[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

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[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]

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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

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[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]

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[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 emissions[198] 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.

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[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

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[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

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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

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[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 mammals[230] 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

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[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

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[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

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[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 DLCD 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]

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[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. & Envtl. 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

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[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

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[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

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[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*

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[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

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[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 Envtl. 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]

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[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

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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

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[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

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[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

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[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,

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[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 eliminated[341] 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]

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[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 $m^3$ in capacity, but the largest carrier visiting the terminal is expected to be 148,000 $m^3$ in capacity.[353] Sierra Club claims that it appears that 148,000 $m^3$ carriers are roughly 15 percent shorter in length and have lower drafts than 217,000 $m^3$

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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 is the waterway is suitable to receive LNG carriers with up to 148,000 $m^3$ 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 $m^3$ 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 acres[357] 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

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[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 $feet^2$ / 43,560 $feet^2$ per acre = 1.6 acres.

[358] Commission staff calculated this figure using the following formula: reduced slip area (68,000 $feet^2$) 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 $m^3$ 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 $m^3$ 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

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[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]

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[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

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[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

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[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 site[405] 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

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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]

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[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

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[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

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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 groups[432] 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]

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[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

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[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,

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[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 impacts[460] 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

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[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;

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[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

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[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

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[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]

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[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

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[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 EIS[518] and the Authorization Order[519] 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 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

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[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

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[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 projects[534] 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

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[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

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[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.

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[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 negotiated 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]

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[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]

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[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

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[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

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[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/middleground 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 a 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

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[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

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[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,

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[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

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[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

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[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

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*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 vaper 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.

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[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

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[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

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[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]

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[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."

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[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

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[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 ESA[694] 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

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[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 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

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[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]

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[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]

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[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 Connecter 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

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[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.

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[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]

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[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

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[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

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[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 (NRSC 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]

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[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

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$CO_2$ 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,

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[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,

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[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

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[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]

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[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 Connecter 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] terrestrial[799] 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

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[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 plan[815] and the Kentuck Slough Wetland Mitigation project[816]—with the Corps, with its own Oregon Department of State Lands, and with the other applicable federal and state agencies.

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[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]

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[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*

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[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 nondegredation 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

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[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 downstream[851]; 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

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[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 EIS[860] 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

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[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 disturbed[865] 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

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[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 conditions[881] 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

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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 period[892] 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

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[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

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[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

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[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

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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

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[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

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[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

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[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

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| Jordan Cove Energy Project L.P. | Docket Nos. CP17-495-000 |
| Pacific Connector Gas Pipeline, LP | CP17-494-000 |

(Issued May 22, 2020)

GLICK, Commissioner, *dissenting*:

1. I dissent from today's order because it violates both the Natural Gas Act[1] (NGA) and the National Environmental Policy Act[2] (NEPA). Rather than wrestling with the Project's[3] 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

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[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

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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 change[20] 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.

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[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 species[26]—as well as historic properties along the Pipeline route[27] and short-term housing in Coos County.[28] It will also cause harmful noise levels in the area[29] 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 Project[35] and its public benefits, assuring us that, as a result, all environmental impact

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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

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[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 Fact 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 perquisite 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 permits[44]—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]

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[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 domain[49] 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.

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[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 $CO_2$ 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

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[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

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[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

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[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

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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 NGA[74] to implement these mitigation measures, which support its public interest finding.[75] For

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[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.

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Richard Glick
Commissioner

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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).

Document Content(s)

# EXHIBIT B

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Jordan Cove Energy Project L.P. | Docket Nos. CP17-495-001 |
| Pacific Connector Gas Pipeline, LP | CP17-494-001 |

# ORDER GRANTING REHEARINGS FOR FURTHER CONSIDERATION

(May 18, 2020)

Rehearings have been timely requested of the Commission's order issued on March 19, 2020, in this proceeding. *Jordan Cove Energy Project L.P. and Pacific Connector Gas Pipeline, LP*, 170 FERC ¶ 61,202 (2020). In the absence of Commission action within 30 days from the date the rehearing requests were filed, the requests for rehearing (and any timely requests for rehearing filed subsequently)[1] would be deemed denied. 18 C.F.R. § 385.713 (2019).

In order to afford additional time for consideration of the matters raised or to be raised, rehearing of the Commission's order is hereby granted for the limited purpose of further consideration, and timely-filed rehearing requests will not be deemed denied by operation of law. Rehearing requests of the above-cited order filed in this proceeding will be addressed in a future order. As provided in 18 C.F.R. § 385.713(d), no answers to the rehearing requests will be entertained.

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[1] *See San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services into Markets Operated by the California Independent System Operator and the California Power Exchange*, 95 FERC ¶ 61,173 (2001) (clarifying that a single tolling order applies to all rehearing requests that were timely filed).

Document Content(s)

# EXHIBIT C

170 FERC ¶ 61,202
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Jordan Cove Energy Project L.P. Docket Nos. CP17-495-000
Pacific Connector Gas Pipeline, LP CP17-494-000

# ORDER GRANTING AUTHORIZATIONS UNDER SECTIONS 3 AND 7 OF THE NATURAL GAS ACT

(Issued March 19, 2020)

1. On September 21, 2017, in Docket No. CP17-495-000, Jordan Cove Energy Project L.P. (Jordan Cove) filed an application for authorization under section 3 of the Natural Gas Act (NGA)[1] and Part 153 of the Commission's regulations[2] to site, construct, and operate a new liquefied natural gas (LNG) export terminal and associated facilities (Jordan Cove LNG Terminal) in unincorporated Coos County, Oregon.

2. On the same day, in Docket No. CP17-494-000, Pacific Connector Gas Pipeline, LP (Pacific Connector) filed an application under NGA section 7(c)[3] and Parts 157 and 284 of the Commission's regulations[4] for a certificate of public convenience and necessity to construct and operate a new interstate natural gas pipeline system (Pacific Connector Pipeline) in Klamath, Jackson, Douglas, and Coos Counties, Oregon. The Pacific Connector Pipeline comprises a new, 229-mile-long pipeline, three new meter stations, and one new compressor station to transport natural gas to the Jordan Cove LNG Terminal for liquefaction and export. Pacific Connector also requests blanket certificates under Part 284, Subpart G of the Commission's regulations to provide open-access transportation services, and under Part 157, Subpart F of the Commission's regulations to perform certain routine construction activities and operations.

[1] 15 U.S.C. § 717b (2018).

[2] 18 C.F.R. pt. 153 (2019).

[3] 15 U.S.C. § 717f.

[4] 18 C.F.R. pts. 157 and 284 (2019).

3. For the reasons discussed below, we will authorize Jordan Cove's proposal under section 3 to site, construct, and operate the Jordan Cove LNG Terminal. We will also authorize Pacific Connector's proposal under section 7(c) to construct and operate the Pacific Connector Pipeline and grant the requested blanket certificate authorizations. These authorizations are subject to the conditions discussed herein.

## I. Background

4. Jordan Cove and Pacific Connector are both Delaware limited partnerships, each with its principal place of business in Houston, Texas. Both companies are wholly-owned subsidiaries of Jordan Cove LNG L.P., which is an indirect, wholly-owned subsidiary of Pembina Pipeline Corporation (Pembina), a Canadian corporation.[5] Upon the commencement of operations proposed in its application, Pacific Connector will become a natural gas company within the meaning of section 2(6) of the NGA[6] and will be subject to the Commission's jurisdiction. As its operations will not be in interstate commerce, Jordan Cove will not be a "natural gas company" as defined in the NGA, although it will be subject to the Commission's jurisdiction under NGA section 3.

5. Because a number of the comments and protests filed in these proceedings discuss a set of previous proposals filed by Jordan Cove and Pacific Connector, we will provide a brief summary of those previous proposals. In March 2013, Jordan Cove filed an application, in Docket No. CP13-483-000, for authorization under section 3 of the NGA to site, construct, and operate an LNG export terminal in Coos County, Oregon. In June 2013, Pacific Connector filed an application, in Docket No. CP13-492-000, for a certificate of public convenience and necessity to construct and operate an interstate pipeline, which would deliver gas from interconnections near Malin, Oregon to Jordan Cove's proposed export terminal. Pacific Connector did not conduct an open season for its proposed pipeline and did not submit any precedent agreements or contracts with its application.[7] Between May of 2014 and October of 2015, Commission staff sent Pacific Connector four data requests asking for precedent agreements or some other evidence of

[5] At the time the applications were filed, Jordan Cove LNG L.P. was an indirect, wholly-owned subsidiary of Veresen, Inc. (Veresen), also a Canadian corporation. On May 1, 2017, Veresen announced that it would be acquired by Pembina. On October 2, 2017, Pembina acquired 100 percent of the outstanding shares of Veresen. *See* Jordan Cove and Pacific Connector's October 4, 2017 filings.

[6] 15 U.S.C. § 717a(6).

[7] *Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,190, at P 14 (2016). (*Jordan Cove*).

the public benefits of its proposal.[8] Pacific Connector failed to make such a showing, and, on March 11, 2016, the Commission denied the applications.[9]

6. Specifically, the denial of Pacific Connector's proposal was based on the Commission's finding that Pacific Connector failed to demonstrate sufficient need for its proposal (through failing to provide precedent agreements for the project or presenting sufficient other evidence of need) to justify the adverse impacts associated with the proposal, including the use of eminent domain.[10] And the denial of Jordan Cove's proposal was based on the Commission's finding that, without a source of gas (i.e., Pacific Connector's pipeline), the terminal could provide no benefit to counterbalance any impacts associated with construction, making the terminal inconsistent with the public interest.[11] The Commission noted that the denials were without prejudice to the applicants submitting new applications "should the companies show a market need for these services in the future."[12]

## II. Proposals

### A. Jordan Cove LNG Terminal (CP17-495-000)

7. Jordan Cove seeks authorization to site, construct, and operate the Jordan Cove LNG Terminal on the bay side of the North Spit of Coos Bay in unincorporated Coos County, Oregon. The project will produce up to 7.8 million metric tonnes per annum (MTPA) of LNG for export. The Jordan Cove LNG Terminal will consist of the following major components: gas inlet and gas conditioning facilities, liquefaction facilities, LNG storage facilities, LNG loading and marine facilities, and support systems.

8. Natural gas delivered to the Jordan Cove LNG Terminal will be treated at a gas conditioning train before entering the liquefaction facilities. The gas conditioning train will include systems for mercury removal, acid gas removal, and dehydration. Treated gas will be liquefied in one of five liquefaction trains, each with a maximum capacity

[8] *Id.* PP 15-18 and 39-41.

[9] *Id.*, *reh'g denied*, 157 FERC ¶ 61,194 (2016).

[10] *Jordan Cove*, 154 FERC ¶ 61,190 at PP 34-42. The Commission noted that Pacific Connector had obtained easements for only 5 percent and 3 percent, respectively, of its necessary permanent and construction right-of-way. *Id.* P 18, *reh'g denied*, 157 FERC ¶ 61,194 at P 27.

[11] *Jordan Cove*, 154 FERC ¶ 61,190 at PP 43-46.

[12] *Id.* P 48.

of 1.56 MTPA, for a total maximum capacity of 7.8 MTPA. In each liquefaction train, the dry treated gas will flow into a refrigerant exchanger, where it will be cooled and turned into liquid.[13] LNG produced by the five trains will be stored in two full-containment storage tanks, which will each be designed to store up 160,000 cubic meters ($m^3$) of LNG.

9. The Jordan Cove LNG Terminal will include a marine slip. Jordan Cove proposes to construct a new access channel to connect the marine slip with the Coos Bay Federal Navigation Channel.[14] Within the marine slip, Jordan Cove proposes to construct one LNG carrier loading berth and one emergency lay berth. The LNG carrier loading berth will be capable of accommodating LNG carriers with a cargo capacity of 89,000 $m^3$ to 217,000 $m^3$. LNG will be transferred from the storage tanks to the LNG carriers via four marine loading arms, consisting of two liquid loading arms, one hybrid arm, and one ship vapor return arm. The transfer equipment will be designed to load the carrier at a rate of 12,000 $m^3$ per hour. Jordan Cove expects the terminal will load between 110 and 120 carriers per year. The marine slip will also include a berth for docking tugboats and security vessels.

10. Jordan Cove proposes to construct a material off-loading facility in an area just outside of the marine slip. The material off-loading facility will receive equipment and materials during project construction and will remain a permanent feature of the terminal following construction, as it will support maintenance and replacement of large equipment components.

11. Jordan Cove also proposes to construct support systems and buildings, including an operations building, an administration and office space, a warehouse, a chemical and material storage building, guard houses and security, and associated infrastructure necessary to support operations.[15]

12. 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

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[13] The liquefaction facilities also include waste heat recovery systems and heavy hydrocarbon removal units.

[14] In its application, Jordan Cove states it plans to dredge four areas abutting the current boundary of the Coos Bay Federal Navigation Channel to allow for more efficient transit of LNG carriers. Jordan Cove's Application at 9. The proposed modifications to the channel are under the jurisdiction of the U.S. Army Corps of Engineers.

[15] Jordan Cove plans to construct a non-jurisdictional Southwest Oregon Regional Safety Center, which will be used for incident management and response by Jordan Cove and multiple state agencies to manage safety and security in the event of emergencies. Jordan Cove's Application at 4.

778 additional acres of land. 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. 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. 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.

13. 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) equivalent of natural gas in the form of LNG to countries with which the United States has a Free Trade Agreement (FTA);[16] and, in March 2014, Jordan Cove received conditional authorization to export annually up to 292 Bcf equivalent to non-FTA countries.[17] 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).[18]

14. On February 6, 2018, Jordan Cove applied to 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."[19] Specifically, Jordan Cove requested to reduce the approved export volume to FTA countries from 438 Bcf equivalent to 395 Bcf equivalent, and to increase the approved export volume to non-FTA countries from 292 Bcf equivalent to 395 Bcf equivalent. In July 2018, DOE/FE amended Jordan Cove's FTA authorization in

[16] *Jordan Cove Energy Project, L.P.*, FE Docket No. 11-127-LNG, Order No. 3041 (December 7, 2011).

[17] *Jordan Cove Energy Project, L.P.*, FE Docket No. 12-32-LNG, Order No. 3413 (March 24, 2014).

[18] These authorizations were associated with Jordan Cove's previously proposed export terminal, in Docket No. CP13-483-000. As explained above, the Commission denied that proposal, along with Pacific Connector's previously proposed pipeline project (Docket No. CP13-492-000), on March 11, 2016. *Jordan Cove*, 154 FERC ¶ 61,190, *reh'g denied*, 157 FERC ¶ 61,194.

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

accordance with Jordan Cove's request.[20] Jordan Cove's requested amendment of its non-FTA authorization remains pending before the DOE/FE.[21]

### B. Pacific Connector Pipeline (CP17-494-000)

#### 1. Facilities and Service

15. In conjunction with the Jordan Cove LNG Terminal, Pacific Connector proposes to construct and operate a new interstate natural gas transmission system designed to provide up to 1,200,000 dekatherms per day (Dth/d) of firm natural gas transportation service. Natural gas transported on the Pacific Connector Pipeline will be received from interconnects with existing natural gas pipeline systems near Malin, Oregon, to the Jordan Cove LNG Terminal for liquefaction and export. The Pacific Connector Pipeline will consist of the following facilities:

- approximately 229 miles of 36-inch-diameter pipeline, extending from the proposed interconnects with Ruby Pipeline and Gas Transmission Northwest in Klamath County, and traversing Coos, Douglas, Jackson, and Klamath Counties, Oregon, to the Jordan Cove LNG Terminal in Coos County;

- a new 62,200-horsepower (hp) compressor station, consisting of two 31,100-hp natural gas-fired, turbine-driven centrifugal compressor units,[22] located at milepost (MP) 228.8 in Klamath County (Klamath Compressor Station);

- three new meter stations: one new delivery meter station in Coos County and two receipt meter stations in Klamath County;[23] and

[20] *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.

[21] The application is pending before the DOE/FE in FE Docket No. 12-32-LNG.

[22] The compressor station will also include a third 31,000-hp natural gas-fired unit, which will be a spare unit used for reliability purposes.

[23] The two receipt meter stations will be co-located within the fenced boundaries of the Klamath Compressor Station at MP 228.8.

- related appurtenant facilities including five pig launcher/receivers, 17 mainline block valves, and communication towers.

16. Pacific Connector estimates the total cost for the Pacific Connector Pipeline to be approximately $3.184 billion.[24]

17. Prior to holding an open season, Pacific Connector executed two precedent agreements with Jordan Cove for 95.8 percent of the firm capacity available on the pipeline; one precedent agreement relates to service during commissioning of the Jordan Cove LNG Terminal and the other is a long-term precedent agreement relating to service once the terminal has achieved commercial operation.[25] Pacific Connector subsequently held an open season from July 18 to August 17, 2017, during which it offered firm transportation service on the Pacific Connector Pipeline to other potential shippers. Pacific Connector states that it received no qualifying bids during the open season.[26] Consequently, Jordan Cove was awarded a full allocation of 1,150,000 Dth/d of capacity. Pacific Connector proposes to provide service to Jordan Cove at negotiated rates.

18. Pacific Connector requests approval of its *pro forma* tariff. Pacific Connector proposes to offer firm transportation service and interruptible transportation service under Rate Schedules FT and IT, respectively. Pacific Connector also requests approval of certain non-conforming provisions of its service agreements with Jordan Cove.

### 2. Blanket Certificates

19. Pacific Connector requests a blanket certificate of public convenience and necessity pursuant to Part 284, Subpart G of the Commission's regulations, authorizing Pacific Connector to provide transportation service to customers requesting and qualifying for transportation service under its proposed FERC Gas Tariff, with pre-granted abandonment authority.[27]

[24] Pacific Connector's Application at Exhibit K.

[25] Pacific Connector's Application at 16-17.

[26] Pacific Connector received two bids from an entity that did not meet Pacific Connector's creditworthiness requirements. These bids, and the related protest filed by Energy Fundamentals Group Inc., are discussed further below. *Infra* PP 66-80.

[27] 18 C.F.R. § 284.221 (2019).

20. Pacific Connector also requests a blanket certificate of public convenience and necessity pursuant to Part 157, Subpart F of the Commission's regulations, authorizing certain future facility construction, operation, and abandonment.[28]

## III. Procedural Matters

### A. Notice, Interventions, Comments, and Protests

21. Notice of Jordan Cove's and Pacific Connector's applications was issued on October 5, 2017, and published in the *Federal Register* on October 12, 2017.[29] The notice established October 26, 2017, as the deadline for filing interventions, comments, and protests. Timely, unopposed motions to intervene and notices of intervention are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.[30] On January 29 and September 13, 2018, and January 8 and April 23, 2019, the Commission issued notices granting numerous late motions to intervene. We grant the remaining unopposed, late motions to intervene.[31]

22. Numerous individuals and entities filed protests and adverse comments concerning the following issues: (1) the need for the projects; (2) the use of eminent domain for the Pacific Connector Pipeline; (3) the public benefits derived from the projects; and (4) the potential impact of the projects on domestic natural gas prices. These concerns are addressed below.

23. In addition, many comments express concern about the environmental impacts of the projects, including land use, safety and security, geological hazards, threatened and endangered species, water quality, cultural resources, air emissions, and environmental justice. These comments are addressed in the final Environmental Impact Statement (EIS) and, as appropriate, below.

24. We also received numerous comments in support of the applications, asserting the projects would bring jobs and tax benefits to the local area, facilitate economic growth in the region, and provide access to new gas markets.

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[28] 18 C.F.R. § 157.204 (2019).

[29] 82 Fed. Reg. 47,502.

[30] 18 C.F.R. § 385.214 (2019). Motions to intervene filed during the draft Environmental Impact Statement (EIS) comment period are deemed timely, *see id.* §§ 157.10(a)(2) and 380.10(a), and are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.

[31] 18 C.F.R. § 385.214(d).

25. On November 13, 2017, and June 18, 2018, Jordan Cove and Pacific Connector filed joint motions for leave to answer and answers to the protests and comments filed in the proceedings. Although the Commission's Rules of Practice and Procedure generally do not permit answers to protests,[32] we will accept the applicants' answers because the answers provide information that has assisted in our decision-making.

### B. Request for Formal Hearing

26. In its motion to intervene, filed on October 25, 2017, Rogue Climate requests a formal (i.e., trial-type) hearing. The Commission has broad discretion to structure its proceedings so as to resolve a controversy in the best way it sees fit.[33] A 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.[34] Otherwise, we provide a hearing in which we reach a decision based on the written record. Rogue Climate raises no material issue of fact that the Commission cannot resolve on the basis of the written record. Accordingly, the Commission denies the request for a formal hearing.

### C. Request for Additional Procedures

27. On October 19, 2018, intervenor Stacey McLaughlin filed a motion requesting additional procedures. Specifically, Ms. McLaughlin requests that the Commission issue a preliminary determination of need for the projects based on non-environmental factors. In order to make the preliminary determination, Ms. McLaughlin requests the Commission require Pacific Connector to fully demonstrate the number or percentage of landowners that have signed pipeline easements,[35] and require Jordan Cove and Pacific Connector to produce signed sales agreements for the gas.

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[32] 18 C.F.R. § 385.213(a)(2).

[33] *See Columbia Gas Transmission, LLC*, 161 FERC ¶ 61,200, at P 15 (2017) (*Columbia I*) (citing *Stowers Oil and Gas Co.*, 27 FERC ¶ 61,001 (1984); *PJM Transmission Owners*, 120 FERC ¶ 61,013 (2007)).

[34] *See, e.g.*, *Columbia I*, 161 FERC ¶ 61,200 at P 15 (citing *Dominion Transmission, Inc.*, 141 FERC ¶ 61,183, at P 15 (2012); *Southern Union Gas Co. v. FERC*, 840 F.2d 964, 970 (D.C. Cir. 1988)).

[35] As part of Commission staff's review of Pacific Connector's proposal, staff issued a data request on December 12, 2018, asking for an update on easement negotiations, including the current percentage of mileage of easements entered. Pacific Connector provided this information on December 21, 2018, and provided an updated filing on July 29, 2019. *See infra* P 89.

28. During one period of time in the past, when reviewing applications for certificates of public convenience and necessity, the Commission sometimes issued a preliminary determination on non-environmental issues, including need, and then, in a subsequent order, reviewed the environmental impacts of the proposal.[36] After determining that issuing multiple orders regarding one project was not an efficient use of our resources, for some time now, however, the Commission has reviewed the non-environmental aspects of a proposal and the proposal's environmental impacts in a single order. We find that implementing additional procedures in these proceedings is not needed or appropriate: this order reviews both the non-environmental and environmental issues associated with the proposals. As noted above, the Commission has broad discretion to structure its proceedings to resolve a controversy in the best way it sees fit.[37]

## IV. Discussion

### A. Jordan Cove LNG Terminal (CP17-495-000)

29. Because the proposed LNG terminal facilities will be used to export natural gas to foreign countries, the siting, construction, and operation of the facilities require Commission approval under section 3 of the NGA.[38] Section 3 provides that an application for the exportation or importation of natural gas shall be approved unless the proposal "will not be consistent with the public interest," and also provides that an application may be approved "in whole or in part, with such modification and upon such

[36] This procedure was not required by the NGA or the Commission's regulations.

[37] *See, e.g.*, *Columbia I*, 161 FERC ¶ 61,200 at P 15.

[38] The regulatory functions of NGA section 3 were transferred to the Secretary of Energy in 1977 pursuant to section 301(b) of the Department of Energy Organization Act, Pub. L. No. 95-91, 42 U.S.C. § 7101 *et seq*. The Secretary of Energy subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of natural gas import and export facilities and the site at which such facilities shall be located. The most recent delegation is in DOE Delegation Order No. 00-004.00A, effective May 16, 2006. The Commission does not authorize importation or exportation of the commodity itself. Rather, applications for authorization to import or export natural gas must be submitted to the DOE. *See EarthReports, Inc. v. FERC*, 828 F.3d 949, 952-53 (D.C. Cir. 2016) (detailing how regulatory oversight for the export of LNG and supporting facilities is divided between the Commission and DOE).

terms and conditions as the Commission may find necessary or appropriate."[39] NGA section 3(a) further provides that, for good cause shown, the Commission may make such supplemental orders as it may find "necessary or appropriate."[40]

30. A number of the comments and protests filed in these proceedings raise issues regarding economic harm associated with the proposed exportation of LNG. For example, numerous individuals and entities allege that: (1) Jordan Cove's proposal will increase domestic natural gas prices;[41] (2) exporting LNG will harm the U.S. balance of trade;[42] (3) exporting LNG will harm U.S. manufacturing jobs;[43] (4) exporting LNG is not in the national interest in terms of energy security;[44] (5) additional exports will compete with already-approved LNG terminals in the Gulf Coast;[45] and (6) authorized exports should be limited to domestically sourced gas so as not to harm U.S. gas producers.[46]

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[39] 15 U.S.C. §§ 717b(a), (e)(3). For a discussion of the Commission's authority to condition its approvals of LNG facilities under section 3 of the NGA, see *Distrigas Corp. v. FPC*, 495 F.2d 1057, 1063-64 (D.C. Cir. 1974), and *Dynegy LNG Prod. Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

[40] 15 U.S.C. § 717b(a).

[41] *See, e.g.*, Allison K Vasquez's October 17, 2017 Motion to Intervene; Patricia J Weber's October 23, 2017 Motion to Intervene at 1.

[42] *See, e.g.*, Citizens Against LNG Inc. and Jody McCaffree's (jointly filed) October 26, 2017 Comments at 9 (CALNG October 26, 2017 Comments).

[43] *See, e.g.*, Western Environmental Law Center's October 6, 2017 Motion to Intervene at 1; Rogue Riverkeeper's October 10, 2017 Motion to Intervene at 1; CALNG October 26, 2017 Comments at 8-9.

[44] *See, e.g.*, Cascadia Wildlands's October 25, 2017 Motion to Intervene at 3; Oregon Wild's September 28, 2017 Motion to Intervene at 1.

[45] *See, e.g.*, Thane Tienson's (writing on behalf of affected landowners Robert Barker, Oregon Women's Land Trust, Evans Schaaf Family LLC, Ronald Schaaf, Deborah Evans, Stacey and Craig McLaughlin, Bill Gow, Landowners United, Clarence Adams, Pamela Brown Ordway, and Barbara Brown) October 3, 2017 Comments at 2-3 (Tienson's October 3 Landowner Comments).

[46] *See, e.g., id.* As discussed further below, Jordan Cove plans to receive natural gas for liquefaction from supply basins in both the U.S. Rocky Mountains and western Canada. *See* Jordan Cove's Application at 2-3.

31. Section 3 of the NGA states, in part, that "no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so."[47] As noted above, in 1977, the Department of Energy Organization Act transferred the regulatory functions of section 3 of the NGA to the Secretary of Energy.[48] Subsequently, the Secretary of Energy delegated to the Commission authority to "[a]pprove or disapprove the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports…."[49]

32. However, the Secretary has not delegated to the Commission any authority to approve or disapprove the import or export of the commodity itself.[50] Nor is there any indication that the Secretary's delegation authorized the Commission to consider the types of economic issues raised in these proceedings as part of the Commission's public interest determination, thus duplicating and possibly contradicting the Secretary's own decisions. Therefore, we decline to address commenters' economic claims (e.g., that exports will increase domestic natural gas prices), which are relevant only to the

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[47] 15 U.S.C. § 717b(a).

[48] Section 301(b) of the DOE Organization Act transferred regulatory functions under section 3 of the NGA from the Commission's predecessor, the Federal Power Commission (FPC), to the Secretary of Energy. Section 402 of the DOE Organization Act transferred regulatory functions under other sections of the NGA, including sections 1, 4, 5, and 7, from the FPC to the Federal Energy Regulatory Commission. Section 402(f) states:

> (f) Limitation
>
> No function described in this section which regulates the exports or imports of natural gas ... shall be within the jurisdiction of the Commission unless the Secretary assigns such a function to the Commission.

[49] DOE Delegation Order No. 00-004.00A (effective May 16, 2006).

[50] *See supra* note 38; *see also Freeport LNG Development, L.P.*, 148 FERC ¶ 61,076, *reh'g denied*, 149 FERC ¶ 61,119 (2014), *aff'd sub nom. Sierra Club v. FERC*, 827 F.3d 36 (D.C. Cir. 2016) (*Freeport*) (finding that because the Department of Energy, not the Commission, has sole authority to license the export of any natural gas through LNG facilities, the Commission is not required to address the indirect effects of the anticipated export of natural gas in its NEPA analysis); *Sabine Pass Liquefaction, LLC*, 146 FERC ¶ 61,117, *reh'g denied*, 148 FERC ¶ 61,200 (2014), *aff'd sub nom. Sierra Club v. FERC*, 827 F.3d 59 (D.C. Cir. 2016).

exportation of the commodity of natural gas, which is within DOE's exclusive jurisdiction, and are not implicated by our limited action of reviewing proposal terminal sites.

33. Commenters also express concern regarding global market support for the project, application of the Commission's *Hackberry* policy, and whether the proposal is in the public interest: we address these concerns in turn. First, commenters and protestors argue that global market conditions do not support the proposals. For example, commenters contend that the global market is already "awash" in gas,[51] that supply will exceed demand for "years to come,"[52] and that markets will not support exports beyond the capacity provided by facilities already approved by the Commission.[53] Further, numerous commenters allege that, because Jordan Cove has not finalized tolling agreements with future customers, Jordan Cove has not sufficiently demonstrated market support for the Jordan Cove LNG Terminal and, consequently, the proposal is not in the public interest.[54] The commenters argue that, given the absence of customer agreements, the Commission must deny the proposal, as it did Jordan Cove's previous proposal.[55]

34. We find that these issues regarding global market support (i.e., whether exports from Jordan Cove LNG Terminal are supported by global market conditions) are beyond the Commission's purview, as they relate to exportation of the commodity and not to construction and operation of the terminal. In addition, finalized tolling agreements are required to be filed with DOE,[56] but not with the Commission. As explained above, the Commission's authority under NGA section 3 applies "only to the siting and operation of

[51] Oregon Wild's September 28, 2017 Motion to Intervene at 1.

[52] Charles A Reid's October 16, 2017 Motion to Intervene at 1.

[53] *See, e.g.*, Sierra Club, Cascadia Wildlands, Center for Sustainable Economy, Citizens Against LNG, Citizens for Renewables, Hair on Fire Oregon, Oregon Shores Conservation Coalition, Oregon Wild, Oregon Women's Land Trust, Pipeline Awareness Southern Oregon, Rogue Climate, Rogue Riverkeeper, and Western Environmental Law Center's (jointly filed) October 26, 2017 Comments and Protests at 13-14 (Sierra Club's October 26, 2017 Protest).

[54] *See, e.g.*, *id.* at 9-13.

[55] *Id.*; CALNG October 26, 2017 Comments at 1 and 4-10.

[56] *See Jordan Cove Energy Project, L.P.*, FE Docket No. 11-127-LNG, Order No. 3041 at 15 (December 7, 2011).

the facilities necessary to accomplish an export[,]"[57] while "export decisions [are] squarely and exclusively within the [DOE]'s wheelhouse . . . ."[58]

35. We also clarify that the Commission did not deny Jordan Cove's previous proposal because Jordan Cove failed to provide finalized tolling agreements. Rather, the Commission 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. As explained further below, under the Commission's Certificate Policy Statement, the Commission applies a balancing test when reviewing NGA section 7 applications. If the Commission issues a certificate of public convenience and necessity, the NGA gives the certificate holder eminent domain authority (conversely, NGA section 3 authorizations do not carry with them eminent domain authority); thus, before issuing such a certificate, the Commission ensures that the public benefits of the proposal outweigh any adverse effects, including economic effects. With regard to Pacific Connector's previous proposal, the Commission found that Pacific Connector's "generalized allegations of need," without the support of any precedent agreements, "[did] not outweigh the risk of eminent domain on landowners and communities;"[59] therefore, the Commission denied Pacific Connector's NGA section 7 application. The Commission went on to deny Jordan Cove's NGA section 3 application because, without a source of gas (i.e., the Pacific Connector Pipeline), the terminal would not be able to function. As discussed below, we are approving Pacific Connector's present proposal, which will provide a source of gas to the proposed Jordan Cove LNG Terminal.

36. Several intervenors request that the Commission decline to apply its *Hackberry* Policy to the Jordan Cove LNG Terminal.[60] Under the *Hackberry* Policy,[61] the

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[57] *Trunkline Gas Co., LLC*, 155 FERC ¶ 61,328, at P 18 (2016).

[58] *Sierra Club v. FERC*, 827 F.3d at 46.

[59] *Jordan Cove Energy Project, L.P.*, 157 FERC ¶ 61,194, at P 29 (2016).

[60] Thane Tienson's (writing on behalf of affected landowners Evans Schaaf Family LLC, Ronald Schaaf, Deborah Evans, Stacey and Craig McLaughlin, Oregon Women's Land Trust, Landowners United, Clarence Adams, Robert Barker, John Clarke, Bill Gow, and Pamela Brown Ordway) June 1, 2018 Comments at 2 (Tienson's June 1 Landowner Comments).

[61] In *Hackberry LNG Terminal, L.L.C.*, the Commission found that its traditional open access regulatory approach and its requirement that providers use NGA section 3 service to maintain tariffs and rate schedules may deter new investment; as a result, the Commission announced it would adopt a less intrusive regulatory regime under NGA

Commission applies a "less intrusive" regulatory regime for LNG terminal service compared to NGA section 7 service; specifically, LNG terminal applicants are not required to offer open-access service under a tariff with cost-based rates. The Energy Policy Act of 2005[62] codified this policy by amending NGA section 3 to provide that, before January 1, 2015, the Commission could not deny an application for authorization of an LNG terminal solely on the basis that the applicant proposed to use the LNG terminal exclusively or partially for gas that the applicant or an affiliate would supply to the facility, or condition an order on the applicant's offering open-access service or any regulation of the rates, charges, terms, or conditions of service.[63] The intervenors argue that, because the January 1, 2015 date has passed, the Commission should use its discretion to deny Jordan Cove's application because Jordan Cove has subscribed for the majority of the capacity on the Pacific Connector Pipeline.

37. The intervenors miscomprehend both the Commission's *Hackberry* Policy and NGA section 3(e)(3)(B)(i). The reference in section 3(e)(3)(B)(i) to "gas that the applicant or an affiliate *will supply to the facility*" speaks to ownership, not transportation, of the gas. Neither the *Hackberry* Policy nor the prohibition in section 3(e)(3)(B)(i) seeks to place limits on a terminal operator's acquisition of capacity on a connecting pipeline. Rather, they address a terminal operator's holding of capacity in its own terminal facility. The intervenors provide no justification for why the Commission should require Jordan Cove to operate its terminal on an open-access basis or impose other economic regulation on its services. We note that the record contains no evidence that any entity other than Jordan Cove is interested in service from the terminal. Other LNG export terminals operate in this manner, transporting their own sources of gas on affiliated upstream pipelines.[64]

38. Intervenors and commenters argue that the environmental impacts of the construction and operation of the Jordan Cove LNG Terminal are not consistent with the

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section 3. 101 FERC ¶ 61,294, at PP 22-24 (2002), *order on reh'g, Cameron LNG, LLC*, 104 FERC ¶ 61,269 (2003).

[62] Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

[63] 15 U.S.C. §§ 717b(e)(3)(B), 717b(e)(4).

[64] *See, e.g.*, *Corpus Christi Liquefaction, LLC*, 149 FERC ¶ 61,283, at PP 4 & 11, and nn. 7 & 8 (2014) (*Corpus Christi*) (Corpus Christi Liquefaction subscribing to 100 percent of the capacity on affiliated Cheniere Pipeline Project). This continues to be how recently authorized, but not yet constructed, LNG export terminals propose to source their gas. *See, e.g.*, *Driftwood LNG LLC*, 167 FERC ¶ 61,054, at P 4 (2019) (Driftwood LNG subscribing to 100 percent of the capacity on affiliated Driftwood Pipeline Project).

public interest, and that the application should accordingly be denied.[65] In addition, intervenors and commenters allege that there are no public benefits associated with the proposal, in part because "most of the corporate profits would be Canadian . . . ."[66]

39. As the U.S. Court of Appeals for the D.C. Circuit has explained, the NGA section 3 standard that a proposal "shall" be authorized unless it "will not be consistent with the public interest[,]"[67] "sets out a general presumption favoring such authorizations."[68] To overcome this favorable presumption and support denial of an NGA section 3 application, there must be an "affirmative showing of inconsistency with the public interest."[69]

40. We have reviewed Jordan Cove's application to determine if the siting, construction, and operation of its LNG facilities would be inconsistent with the public interest.[70] The proposed site for the Jordan Cove LNG Terminal comprises primarily

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[65] *See, e.g.*, Cascadia Wildlands's October 25, 2017 Motion to Intervene at 2-3; Waterkeeper Alliance's October 25, 2017 Motion to Intervene at 2. Some of the environmental harms alleged are associated with exportation of the commodity (i.e., "exporting natural gas is not in the public interest because it will increase the harmful and controversial practice of fracking . . . ." Oregon Wild's September 28, 2017 Motion to Intervene at 1), and thus are beyond the Commission's purview. *Supra* PP 31-32.

[66] Oregon Wild's September 28, 2017 Motion to Intervene at 1. We note that many of the arguments about public benefits are tied to allegations of economic harm associated with the proposed exportation of LNG (e.g., alleging no public good will result from exporting gas to potential future adversaries, James Meunier's October 27, 2017 Comments), which, as noted above, is a matter beyond the Commission's jurisdiction. *See supra* PP 30-32.

[67] 15 U.S.C. § 717b(a).

[68] *EarthReports v. FERC*, 828 F.3d at 953 (citing *W. Va. Pub. Servs. Comm'n v. U.S. Dep't of Energy*, 681 F.2d 847, 856 (D.C. Cir. 1982)); *see also Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189, 203 (D.C. Cir. 2017).

[69] *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d at 203 (quoting *Panhandle Producers & Royalty Owners Ass'n v. Econ. Regulatory Admin.*, 822 F.2d 1105, 1111 (D.C. Cir. 1987)).

[70] *See Nat'l Steel Corp.*, 45 FERC ¶ 61,100, at 61,332-33 (1998) (observing that DOE, "pursuant to its exclusive jurisdiction, has approved the importation with respect to every aspect of it except the point of importation," and that the "Commission's authority in this matter is limited to consideration of the place of importation, which necessarily includes the technical and environmental aspects of any related facilities.").

privately controlled land consisting of a combination of brownfield decommissioned industrial facilities, an existing landfill requiring closure, and open land.[71] In addition, portions of the proposed site were previously used for disposal of dredged material.[72] Further, as discussed below, the final EIS prepared for the proposed projects finds that, although the project would result in temporary, long-term, and permanent impacts on the environment, some of which would be significant (e.g., constructing the Jordan Cove LNG Terminal would temporarily but significantly impact housing in Coos Bay, and constructing and operating the terminal would permanently and significantly impact the visual character of Coos Bay), most impacts would be reduced to less-than-significant levels if the projects are constructed and operated in accordance with applicable laws and regulations and the environmental mitigation measures recommended in the final EIS and adopted by this order.[73] In addition, we note that the proposal would have economic and public benefits, including benefits to the local and regional economy and the provision of new market access for natural gas producers.[74] We find that the various arguments raised regarding the Jordan Cove LNG Terminal do not amount to the affirmative showing of inconsistency with the public interest that is necessary to overcome the presumption in section 3 of the NGA.

41. In accordance with the Memorandum of Understanding signed on August 31, 2018, by the Commission and the Pipeline and Hazardous Materials Safety Administration (PHMSA) within the U.S. Department of Transportation (DOT),[75] PHMSA undertook a review of the proposed facility's ability to comply with the federal safety standards contained in Part 193, Subpart B, of Title 49 of the Code of Federal

[71] Final EIS at 5-6.

[72] *Id.* at 4-424.

[73] *Id.* at ES-6 to ES-7 and 5-1.

[74] In addition, pursuant to NGA section 3(c), the exportation of gas to FTA nations "shall be deemed to be consistent with the public interest." 15 U.S.C. § 717b(c). As noted above, Jordan Cove has received authorization to export to FTA nations. *See supra* PP 13-14.

[75] *Memorandum of Understanding Between the Department of Transportation and the Federal Energy Regulatory Commission Regarding Liquefied Natural Gas Transportation Facilities* (Aug. 31, 2018), https://www.ferc.gov/legal/mou/2018/FERC-PHMSA-MOU.pdf.

Regulations.[76] On September 11, 2019,[77] PHMSA issued a Letter of Determination indicating Jordan Cove has demonstrated that the siting of its proposed LNG facilities complies with those federal safety standards. If the proposed project is subsequently modified so that it differs from the details provided in the documentation submitted to PHMSA, further review would be conducted by PHMSA.

42. Jordan Cove is proposing to operate its LNG terminal under the terms and conditions mutually agreed to by its prospective customers and will solely bear the responsibility for the recovery of any costs associated with construction and operation of the terminal. Accordingly, Jordan Cove's proposal does not trigger NGA section 3(e)(4).[78]

43. Accordingly, we find that, subject to the conditions imposed in this order, Jordan Cove's proposal is not inconsistent with the public interest. Therefore, we will grant Jordan Cove's application for authorization under NGA section 3 to site, construct, and operate its proposed LNG terminal facilities.

### B. Pacific Connector Pipeline (CP17-494-000)

#### 1. Section 7 of the NGA

44. Several commenters contend that the Pacific Connector Pipeline cannot be authorized under section 7 of the NGA; these commenters assert that the pipeline may only be authorized under section 3 of the NGA.[79] The commenters state that, because the pipeline will serve only the export terminal and because the pipeline is located wholly within the state of Oregon, the facilities will not be used to transport gas in interstate commerce and, accordingly, cannot be authorized under section 7.[80] As support for this

[76] 49 C.F.R. pt. 193, Subpart B (2019).

[77] *See* Commission staff's September 24, 2019 Memo filed in Docket No. CP17-495-000 (containing PHMSA's Letter of Determination).

[78] 15 U.S.C. § 717b(e)(4) (governing orders for LNG terminal offering open access service).

[79] *See* Niskanen Center and Affected Landowners' (jointly filed) July 5, 2019 Comments at 48-53 (Niskanen Center's July 5, 2019 Comments); Snattlerake Hills, LLC's July 5, 2019 Comments at 14 (Snattlerake's July 5, 2019 Comments).

[80] *See* Snattlerake's July 5, 2019 Comments at 14.

argument, the commenters cite to *Border Pipe Line v. FPC*[81] and *Big Bend Conservation Alliance v. FERC*.[82]

45. *Border* involved a pipeline "located wholly within the state of Texas," delivering gas from a production field in Texas and selling "to an industrial consumer which transports the gas into Mexico and uses it there."[83] In *Border*, the court rejected the Commission's determination that the otherwise intrastate pipeline was an interstate pipeline subject to regulation under section 7, solely because the pipeline sold gas to a customer who then exported the gas to Mexico.[84] On appeal, the court declined to interpret "interstate commerce" to include foreign commerce, and vacated the Commission's order subjecting the pipeline to its section 7 authority as an interstate pipeline.[85]

46. Similarly, *Big Bend* involved a pipeline (the Trans-Pecos Pipeline) that delivered gas produced in Texas to the Texas-Mexico border. The Commission authorized the border-crossing facilities (a 1,093-foot pipeline running from a metering station to the international border) under section 3 of the NGA, and determined that the Trans-Pecos Pipeline, which would deliver gas to those facilities, was an intrastate pipeline and not

[81] 171 F.2d 149 (D.C. Cir. 1948) (*Border*).

[82] 896 F.3d 418 (D.C. Cir. 2018) (*Big Bend*).

[83] 171 F.2d at 150; *see also id.* at 151 (noting that the "operation before us is wholly local, and it is only because of petitioner's sales for foreign commerce that the Commission seeks to control all its activities").

[84] *Id.* at 151. NGA section 2(7) defines interstate commerce as "commerce between any point in a State and any point outside thereof . . . but only insofar as such commerce takes place within the United States." 15 U.S.C. § 717a(2). In an underlying order, the Commission concluded, erroneously, that the "statutory definition of 'interstate commerce' is to be interpreted as embracing 'foreign commerce,' for 'any point outside' of a State includes a point in a foreign country." *Reynosa Pipe Line Co.*, 5 FPC 130, 136 (1946). The court expressly rejected the Commission's interpretation of section 2(7) to assert section 7 jurisdiction over the pipeline. *Border*, 171 F.2d at 151-52.

[85] *Border*, 151 F.2d at 151-52 (clarifying that the latter phrase of section 2(7) requires gas be transported between two states to be in interstate commerce, explaining that "the exportation of natural gas from the United States to a foreign country, or the importation of natural gas from a foreign country is not 'interstate commerce' as that term is contemplated by the [NGA].").

subject to section 7 of the NGA.[86] On appeal, the court affirmed the Commission, noting that "substantial evidence supports FERC's conclusion that the [Trans-Pecos Pipeline] 'initially will only transport natural gas produced in Texas and received from other Texas intrastate pipelines or Texas processing plants[,]'" and that "there is 'abundant Texas-sourced natural gas to supply the Trans-Pecos Pipeline without relying on interstate volumes.'"[87]

47. Unlike the pipelines in *Border* and *Big Bend*, the Pacific Connector Pipeline will not be delivering gas solely produced in Oregon. Rather, the Pacific Connector Pipeline will deliver gas received from interconnects with existing interstate natural gas pipeline systems, specifically Ruby Pipeline and Gas Transmission Northwest.[88] Ruby Pipeline is a 675-mile-long pipeline, extending from Wyoming to Oregon, delivering gas from the Rocky Mountain production area to west coast markets.[89] Gas Transmission Northwest's interstate pipeline system extends for approximately 1,351 miles between the United States-Canada border at Kingsgate, British Columbia, and the Oregon-California border, providing open-access service in Idaho, Washington, and Oregon.[90]

48. The Commission and the courts have consistently held that "[g]as crossing a state line at any stage of its movement to the ultimate consumer is in interstate commerce during the entire journey."[91] Accordingly, the transportation service provided by the Pacific Connector Pipeline will be in interstate commerce.

49. The Commission has interpreted section 3 of the NGA to mean that, "when companies construct a pipeline to transport import or export volumes, only a small segment of the pipeline close to the border is deemed to be the import or export facility for which section 3 authorization is necessary."[92] Whether the rest of the pipeline is

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[86] *Big Bend*, 896 F.3d at 420.

[87] *Id.* at 422 (quoting *Trans-Pecos Pipeline, LLC*, 157 FERC ¶ 61,081, at PP 9, 11 (2016)).

[88] *See supra* P 15.

[89] *See Ruby Pipeline, L.L.C.*, 136 FERC ¶ 61,054, at P 1 (2010).

[90] *See Gas Transmission Northwest, LLC*, 142 FERC ¶ 61,186, at P 2 (2013).

[91] *Maryland v. Louisiana*, 451 U.S. 725, 755 (1981). *See also California v. Lo-Vaca Gathering Co.*, 379 U.S. 366, 369 (1965); *Western Gas Interstate Co.*, 59 FERC ¶ 61,022, at 61,049 (1992) (*Western*).

[92] *Trans-Pecos Pipeline, LLC*, 155 FERC ¶ 61,140, at P 31 n.33 (2016) (citing *Southern LNG, Inc.*, 131 FERC ¶ 61,155, at P 15 n.17 (2010)). *See also Western*,

subject to section 7 depends on whether it will be transporting gas in intrastate commerce, and thus be NGA exempt, or interstate commerce, and thereby be subject to the Commission's jurisdiction.

50. Here, we do not find it reasonable or appropriate to consider the entire 229-mile-long Pacific Connector Pipeline part of the section 3 export facility as commenters contend. The limited section 3 authority DOE has delegated to the Commission covers only "the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exit for exports."[93] The Commission's determination that its section 3 authority is restricted to "particular facilities" at "the place of entry for imports and exit for exports" is consistent with DOE's delegation.[94]

51. Because Pacific Connector's proposed pipeline facilities will be used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.[95]

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59 FERC at 61,048 (the Commission's "regulatory responsibility under section 3 of the NGA over import/export facilities includes only the siting, construction, and operations of the facilities at the site of exportation. We have continually held that [the] Commission's section 3 jurisdiction is limited to the point of import/exportation.") (citations removed); *Yukon Pacific Corp.*, 39 FERC ¶ 61,216, at 61,758 (1987) (determining that the Commission would have jurisdiction under section 3 to approve or disapprove the "place of export," and that "[s]uch jurisdiction [would be] independent of any additional jurisdiction the Commission may have . . . to approve or disapprove the siting, construction and operation of new gas pipeline facilities necessary to implement the export.").

[93] DOE Delegation Order No. 00-004.00A, section 1.21(A) (effective May 16, 2006).

[94] For border-crossing facilities, the Commission, under section 3, typically authorizes several hundred feet of pipe, extending from the border to a meter (or other physically identifiable point).

[95] 15 U.S.C. §§ 717f(c), (e).

### 2. Certificate Policy Statement

52. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.[96] The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new natural gas facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

53. Under this policy, the threshold requirement for applicants proposing new projects is that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, and landowners and communities affected by the construction of the new natural gas facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to consider the environmental analysis where other interests are addressed.

#### a. Subsidization and Impact on Existing Customers

54. As stated above, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from existing customers. As Pacific Connector is a new company, it has no existing customers. As such, there is no potential for subsidization on Pacific Connector's system or degradation of service to existing customers.

#### b. Need for the Project

55. Intervenors and commenters challenge the need for the Pacific Connector Pipeline on several grounds including: (1) the use of precedent agreements with an affiliate to

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[96] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, *corrected*, 89 FERC ¶ 61,040 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

demonstrate need; (2) Pacific Connector's open season was not conducted in a transparent and non-discriminatory manner; and (3) public benefits of the proposal are nonexistent or overstated.

### i. Precedent Agreements with Affiliate Shipper

56. Several intervenors and commenters allege that Pacific Connector has failed to demonstrate market support for its proposal. In particular, Sierra Club claims that Pacific Connector's precedent agreements with Jordan Cove are "weak evidence of market demand."[97] Sierra Club contends that we should treat Jordan Cove as an "overnight" affiliate shipper because the agreements were entered into "as an apparent hasty last resort,"[98] and, consequently and pursuant to the Commission's finding in *Independence Pipeline Co.*,[99] we should be skeptical of the agreements as evidence of market support.

57. Sierra Club further argues that other circumstances of these proceedings undermine the value of any support offered by the precedent agreements. First, Sierra Club asserts that, in the past, when the Commission has found market support for a pipeline on the basis of a precedent agreement with an affiliated LNG export project, the pipeline required little, if any, new rights-of-way and was not opposed by local landowners, unlike the Pacific Connector Pipeline.[100] Second, Sierra Club states that in those instances when market support for a pipeline was demonstrated on the basis of a precedent agreement with an affiliated LNG export project, the affiliate exporter had "generally already finalized liquefaction tolling agreements,"[101] which made clear that it would be able to provide support for the pipeline. For these reasons, Sierra Club argues

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[97] Sierra Club's October 26, 2017 Protest at 16. ("Nonetheless, while FERC may accept such agreements [with affiliates] as evidence, FERC has clearly indicated they are *weak* evidence. The certificate policy statement explains that 'a precedent agreement with an affiliate' provides a weaker demonstration of need than a project with multiple precedent agreements with unaffiliated customers.") (emphasis in original) (citing Certificate Policy Statement, 88 FERC at 61,748-49).

[98] Sierra Club's October 26, 2017 Protest at 18.

[99] 89 FERC ¶ 61,283 (1999) (*Independence*).

[100] Sierra Club's October 26, 2017 Protest at 17 (citing *Golden Pass Products LLC*, 157 FERC ¶ 61,222 (2016) (*Golden Pass*); *Magnolia LNG, LLC*, 155 FERC ¶ 61,033 (2016) (*Magnolia*); *Sabine Pass Liquefaction Expansion, LLC*, 151 FERC ¶ 61,012 (2015) (*Sabine Pass*); *Corpus Christi*, 149 FERC ¶ 61,283 (2014) (*Corpus Christi*)).

[101] Sierra Club's October 26, 2017 Protest at 17.

that a "stronger" showing of market support is required here.[102] Sierra Club concludes that "[m]arket support is essential to the demonstration of public benefits" and the applicants' "failure to show market support here is therefore fatal to their assertion of public benefits."[103]

58. In their November 13, 2017 answer, the applicants assert that the Commission has determined that precedent agreements are sufficient to demonstrate project need. Moreover, the applicants state that the Commission has established that it does not distinguish between agreements with affiliates and non-affiliates for such purposes, so long as they are binding agreements.[104] The applicants explain that, unlike the facts in *Independence*, Jordan Cove "was created for the purpose of developing the LNG Terminal, is not a new company, and was not created 'to falsely evidence market need for the project.'"[105] In addition, they note that the Commission has previously accepted agreements between a terminal sponsor and a pipeline as evidence of market need.[106] Lastly, the applicants argue that Sierra Club provides no precedent for why the

[102] *Id.* at 15-19.

[103] *Id.* at 8.

[104] Several landowners contend that Pacific Connector's precedent agreements with Jordan Cove are likely not binding. *See, e.g.*, Tienson's October 3 Landowner Comments at 2. In their November 13, 2017 answer, the applicants clarify that the precedent agreements are in fact binding. See Pacific Connector and Jordan Cove's November 13, 2017 Answer at 6.

[105] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 8 (quoting *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 48 (2017) (*Mountain Valley*)).

[106] In its application, Pacific Connector notes that in *Golden Pass*, 157 FERC ¶ 61,222; *Magnolia*, 155 FERC ¶ 61,033; *Sabine Pass*, 151 FERC ¶ 61,012; and *Corpus Christi*, 149 FERC ¶ 61,283, the Commission accepted agreements between the terminal sponsor and pipeline as evidence of market support for the pipeline. Several landowners assert that in each of those proceedings, the Commission approved the proposals "only with the stipulation that they be confined to U.S. domestically-sourced natural gas." *See* Tienson's October 3 Landowner Comments at 2. Although the orders approving each of these proposals note that the pipelines would transport "domestic" natural gas, the Commission was merely summarizing the applicants' proposals and not examining the issue of whether the pipelines should be "confined" to transporting only domestically sourced gas. *See Golden Pass*, 157 FERC ¶ 61,222 at P 12; *Magnolia*, 155 FERC ¶ 61,033 at P 9; *Sabine Pass*, 151 FERC ¶ 61,012 at P 37; and *Corpus Christi*, 149 FERC ¶ 61,283 at P 9.

Commission should veer from its current policy of "not look[ing] behind precedent or service agreements to make judgments about the needs of individual shippers."[107]

**Commission Determination**

59. The Certificate Policy Statement established a new policy under which the Commission would allow an applicant to rely on a variety of relevant factors to demonstrate need, rather than continuing to require that a particular percentage of the proposed capacity be subscribed under long-term precedent or service agreements.[108] These factors might include, but are not limited to, precedent agreements, demand projections, potential cost savings to consumers, or a comparison of projected demand with the amount of capacity currently serving the market.[109] The Commission stated that it would consider all such evidence submitted by the applicant regarding project need. The policy statement made clear that, although precedent agreements are no longer required to be submitted, they are still significant evidence of project need or demand.[110]

60. Sierra Club is incorrect in its assertion that the Certificate Policy Statement deems precedent agreements with affiliates to be "weak evidence" of market support. Rather, the Certificate Policy Statement states:

> A project that has precedent agreements with multiple new customers may present a greater indication of need than a project with only a precedent agreement with an affiliate. The new focus, however, will be on the impact of the project on the relevant interests balanced against the benefits to be gained from the project. As long as the project is built without subsidies from the existing ratepayers, the fact that it would be used by affiliated shippers is unlikely to create a rate impact on existing ratepayers.[111]

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[107] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 7 (quoting *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at P 54 (2017)).

[108] Certificate Policy Statement, 88 FERC at 61,747. Prior to the Certificate Policy Statement, the Commission required a new pipeline project to have contractual commitments for at least 25 percent of the proposed project's capacity. *See id.* at 61,743.

[109] *Id.* at 61,747.

[110] *Id*. The policy statement specifically recognized that such agreements "always will be important evidence of demand for a project[.]" *Id.* at 61,748.

[111] Certificate Policy Statement, 88 FERC at 61,748-49.

Thus, the Commission is less focused on whether the contracts are with affiliated or unaffiliated shippers and more focused on whether existing ratepayers would subsidize the project.[112]

61. The fact that the project shipper is an affiliate of Pacific Connector does not require the Commission to look behind the precedent agreements to evaluate project need or view that contract differently from one with a non-affiliate. As the court affirmed in *Minisink Residents for Environmental Preservation & Safety v. FERC*, the Commission may reasonably accept the market need reflected by the applicant's existing contracts with shippers and not look behind those contracts to establish need.[113] And in *Appalachian Voices v. FERC*, the court affirmed the Commission's determination that "[a]n affiliated shipper's need for new capacity and its obligation to pay for such service under a binding contract are not lessened just because it is affiliated with the project sponsor."[114]

62. When considering applications for new certificates, the Commission's primary concern regarding affiliates of the pipeline as shippers is whether there may have been undue discrimination against a non-affiliate shipper.[115] Although one such allegation was made, as discussed further below,[116] we have determined that Pacific Connector did not engage in anticompetitive behavior or undue discrimination.

63. In addition, we find that *Independence* is distinguishable from the facts here. *Independence* was a pre-Certificate Policy Statement proceeding. Thus, as discussed above,[117] under the then-applicable policy the pipeline was required to demonstrate contractual commitments for at least 25 percent of the proposed project's capacity. However, Independence had provided no contractual evidence of market support when it

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[112] *See, e.g.*, *Mountain Valley*, 161 FERC ¶ 61,043, at P 43 n.51.

[113] 762 F.3d 97, 110 n.10 (D.C. Cir. 2014) (*Minisink*) ; *see also Sierra Club v. FERC*, 867 F.3d 1357, 1379 (D.C. Cir. 2017) (*Sabal Trail*) (finding that the pipeline project proponent satisfied the Commission's "market need" where 93 percent of the pipeline project's capacity has already been contracted for).

[114] No. 17-1271, 2019 WL 847199, at *1 (D.C. Cir. Feb. 19, 2019) (unpublished) (quoting *Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 at P 45).

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

[116] *See infra* PP 66-80.

[117] *See supra* note 108.

filed its application. After repeated statements by Independence that eleven shippers had expressed interest in the project, followed by its failure to provide precedent agreements to support those statements, Commission staff informed Independence that it would dismiss Independence's application by a specified deadline, if the precedent agreements were not submitted.[118] On the eve of the deadline, Independence created an affiliate marketer with whom it signed a precedent agreement.[119] The Commission rejected the precedent agreement as evidence of market support for the project finding Independence had created an affiliate "virtually overnight" to falsely evidence market need for the project.[120] Here, Pacific Connector signed binding precedent agreements with Jordan Cove before filing its application with the Commission in September 2017. Moreover, Jordan Cove is a limited partnership that was created in 2005,[121] years prior to the filing date of Pacific Connector's application, and was established for the purpose of developing the Jordan Cove LNG Terminal; without more this is insufficient to establish that Jordan Cove was created to falsely evidence market need for the Pacific Connector Pipeline.

64. The other reasons proffered by Sierra Club as to why Pacific Connector's precedent agreements with Jordan Cove are insufficient evidence of market support are unconvincing.[122] Sierra Club contends that the Commission has not previously authorized a pipeline for which market support was demonstrated on the basis of a precedent agreement with an affiliate LNG export terminal, if: (1) the pipeline would require new rights-of-way or had opposition from landowners; or (2) the affiliate LNG export terminal had not yet finalized its tolling agreements. The Commission does not require finalized tolling agreements in order to make a finding that an LNG export terminal's precedent agreement with a supplying pipeline provides sufficient market support; we recognize that these tolling agreements are often finalized after the

[118] *See Independence*, 89 FERC ¶ 61,283, at 61,820.

[119] *See id.* at 61,840.

[120] *See id.*

[121] *See* Jordan Cove's Application at Exhibit A (State of Delaware Certificate of Limited Partnership).

[122] Sierra Club and others also assert that our determination regarding project need for Pacific Connector's previous proposal (CP13-492-000) supports our making a similar determination in the instant proceeding. *See* Sierra Club's October 26, 2017 Protest at 1-2. We disagree. The current proposal is distinguishable from the previous proposal in that Pacific Connector has provided precedent agreements for nearly 96 percent of the firm capacity available on the pipeline. This necessarily changes our evaluation of project need and market support.

Commission issues an authorization. We do not believe that the mere fact that an LNG terminal and the supplying pipeline may be affiliated warrants a change in our approach. In addition, although the Commission evaluates applications for new pipeline construction under its Certificate Policy Statement, which includes consideration of whether a pipeline has made efforts to minimize adverse impacts on landowners and surrounding communities, the Certificate Policy Statement itself recognizes that pipelines are not always able to resolve all opposition from landowners.[123] Thus, here, we balance the landowner opposition against the fact that nearly 96 percent of the pipeline's service capability has been subscribed under long-term precedent agreements.

65. In conclusion, we find that the precedent agreements entered into between Pacific Connector and Jordan Cove for approximately 96 percent of the pipeline's capacity adequately demonstrate that the project is needed. Ordering Paragraph (G) of this order requires that Pacific Connector file a written statement affirming that it has executed contracts for service at the levels provided for in the precedent agreements prior to commencing construction.

### ii. Pacific Connector's Open Season

66. Energy Fundamentals Group Inc. (EFG) protested the proceedings, arguing that Pacific Connector did not conduct its open season in a transparent and non-discriminatory manner. While generally supportive of Jordan Cove and Pacific Connector's proposals, EFG alleges that it was precluded from securing capacity on the Pacific Connector Pipeline because Pacific Connector did not want market bids from entities other than its affiliate, Jordan Cove.[124]

67. EFG[125] states that it submitted two bids[126] for capacity during Pacific Connector's open season but that its bids were deemed "unacceptable [because EFG] did not meet the creditworthiness requirement in the Open Season Notice."[127] EFG alleges that the open season did not describe in specificity the creditworthiness requirement a bidder would

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[123] Certificate Policy Statement, 88 FERC at 61,749.

[124] EFG's October 26, 2017 Protest at 3 and 7.

[125] In its protest, EFG notes that, through an agreement with Pembina, it holds an option to acquire up to a 20 percent equity interest in Jordan Cove. EFG states it has not yet exercised this right. *Id.* at 3.

[126] EFG states that its bids were submitted through Energy Fundamentals Group LLC. *Id.* at 4.

[127] *Id.* at 4.

need to provide in conjunction with its bid. EFG also argues it was not provided Pacific Connector's tariff but that it "appear[ed] . . . such information was made available to Jordan Cove[.]"[128] And, EFG notes that Pacific Connector and Jordan Cove negotiated a number of non-conforming provisions.

68. EFG contends that it was "similarly situated" to Jordan Cove but that its bids were rejected while Jordan Cove's bids were accepted.[129] EFG asserts that Pacific Connector "could not have negotiated in an arms-length fashion with its affiliate," and that Pacific Connector "was seeking a single shipper result from the Open Season on the most favorable terms with its affiliate."[130] EFG alleges that Jordan Cove may be acting as a placeholder for prospective terminal users or other pipeline shippers, or that Jordan Cove may intend to assign its position to another entity a later date; EFG contends that these other entities may not meet Pacific Connector's creditworthiness requirement.[131] For these reasons, EFG claims that "undue discrimination seems obvious and apparent."[132]

69. In its November 13, 2017 answer, Pacific Connector explains that it conducted its open season in an open and non-discriminatory manner in accordance with Commission policy. Pacific Connector states that each of EFG's open season bids were for the full capacity of the pipeline and that, because the combined bids of EFG and Jordan Cove were greater than the capacity of the pipeline,[133] Pacific Connector needed "to ensure all bids were valid to allocate the available capacity correctly."[134] Pacific Connector asserts that its open season notice stated that "[Pacific Connector] reserves the right to reject [open season bids] in the event that requesting parties are unable to meet applicable creditworthiness requirements,"[135] and that confirming creditworthiness of its customers following the open season was critical to its ability to move forward with the project. Pacific Connector contends that it would invest "substantial funds in developing the

[128] *Id.* at 5-6.

[129] *Id.* at 7.

[130] *Id.* at 6.

[131] *Id.* at 5.

[132] *Id.* at 7.

[133] As noted above, the precedent agreements executed with Jordan Cove were for 95.8 percent of the firm capacity of the pipeline.

[134] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 30.

[135] *Id.*; *see also* Pacific Connector's Application at Exhibit Z-2.

[p]ipeline,"[136] and that it would not be prudent to incur those costs without adequate assurances of creditworthiness from its customers. In addition, Pacific Connector notes that it would raise funds for its pipeline through a mix of debt and equity, and its "ability to repay the borrowed funds and provide equity investors a return on capital is directly related to its receipt of full and timely payment from its customers."[137]

70. Pacific Connector states that, at the close of its open season, it "requested that all bidders[138] submit adequate assurances that, at the proper time, each bidder would be able to deliver the credit support required under the precedent agreements."[139] According to Pacific Connector, a bidder could either prove it qualifies as creditworthy,[140] or provide adequate assurances that it could post the required credit support at the appropriate time under the precedent agreement.[141]

71. Pacific Connector explains that it asked both EFG and Jordan Cove to meet the applicable creditworthiness requirements but that only Jordan Cove sufficiently satisfied this request. Pacific Connector states that it provided EFG multiple opportunities to provide adequate assurances of its creditworthiness but that EFG failed to do so; EFG and its affiliates do not have a credit rating, and EFG did not show it could post the required support.[142] Jordan Cove did provide adequate assurances that it could meet its future obligations. Jordan Cove submitted a letter from its parent company at the time,

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[136] Pacific Connector and Jordan Cove's November 13,2 017 Answer at 30.

[137] *Id.* at 31.

[138] Jordan Cove and EFG were the only bidders.

[139] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 29.

[140] Pacific Connector explains that creditworthiness can be established by having a qualifying credit rating ("BBB" or better from Standard & Poor's, "Baa2" or better from Moody's Investor Services, or an equivalent rating from another ratings agency) or following an analysis of audited financial statements. *Id.*

[141] Pacific Connector states that non-creditworthy bidders could post credit support for three years' of reservation charges in the form of a guarantee from a creditworthy entity, a letter of credit, or another form of credit support acceptable to Pacific Connector. *Id.* at 29-30.

[142] *Id.* at 31-33.

Veresen,[143] demonstrating that Veresen was creditworthy and willing to provide a guarantee of Jordan Cove's obligations.[144]

72. Pacific Connector avers that it could not take the risk that EFG would default on its obligation and that relying on such an agreement could impede Pacific Connector's own ability to obtain financing. Accordingly, Pacific Connector alleges that Jordan Cove and EFG were not similarly situated and that EFG's bids were properly rejected while Jordan Cove's bids were accepted.

73. Pacific Connector asserts that inclusion of additional credit support obligations for shippers in the open season notice and precedent agreements is permitted under Commission policy, and that a pipeline's ability "to assess the legitimacy of the bidders in the open season . . . protects the Commission's open season process from the possibility of abuse."[145]

74. Lastly, Pacific Connector explains that entities bidding on new pipelines regularly submit bids without a copy of the tariff because the open season takes place before the certificate application and the *pro forma* tariff are filed with the Commission. In addition, Pacific Connector notes that its tariff would be subject to review and approval by the Commission, and entities would be free to file comments on and request changes to the tariff once it was submitted to the Commission. Further, Pacific Connector states that it was impossible for EFG and Pacific Connector to have any discussions regarding non-conforming provisions because EFG submitted its bids "[s]econds before the end of the open season[.]"[146] Moreover, Pacific Connector contends that shippers similarly situated to its anchor shipper, Jordan Cove, would have been offered non-conforming provisions, but it was under no obligation to offer such contractual rights to EFG because EFG's bids were rejected.

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[143] *See supra* note 5.

[144] In its November 13, 2017 Answer, Pacific Connector notes that Jordan Cove's current parent company, Pembina, also qualifies as "a creditworthy entity permitted to provide a guarantee under Jordan Cove's precedent agreements." Pacific Connector and Jordan Cove's November 13, 2017 Answer at 34 n.119.

[145] *Id.* at 32.

[146] *Id.* at 29 and 35.

**Commission Determination**

75. For pipeline capacity that has been constructed and placed in service, the Commission's general policy has been to permit pipelines to require shippers that fail to meet a pipeline's creditworthiness requirements for service put up collateral equal to three months' worth of reservation charges.[147] When undertaking the construction of new pipeline infrastructure, however, the Commission recognizes that "pipelines need sufficient collateral from non-creditworthy shippers to ensure, prior to the investment of significant resources into the project, that it can protect its financial commitment to the project."[148] Therefore, the Commission's creditworthiness policy permits larger collateral requirements for pipeline construction projects to be executed between the pipeline and the initial shippers. The Commission has explained that:

> For mainline projects, the pipeline's collateral requirement must reasonably reflect the risk of the project, particularly the risk to the pipeline of remarketing the capacity should the initial shipper default. Because these risks may vary depending on the specific project, no predetermined collateral amount would be appropriate for all projects.[149]

76. The precedent agreements EFG signed in order to place its bids specified Pacific Connector's creditworthiness requirements.[150] Following the close of its open season, and consistent with the signed precedent agreements and open season notice, Pacific Connector requested that all bidders provide adequate assurances that, at the proper time, each bidder would be able to deliver the credit support required under the precedent agreements.[151] The precedent agreements for Jordan Cove and EFG included "identical credit support obligations to apply at the same time."[152] According to Pacific Connector, EFG, unlike Jordan Cove, was unable to provide the necessary credit support. EFG does not provide any evidence that it did, in fact, meet Pacific Connector's creditworthiness

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[147] *See Policy Statement on Creditworthiness for Interstate Natural Gas Pipelines and Order Withdrawing Rulemaking Proceeding*, 111 FERC ¶ 61,412, at P 11 (2005).

[148] *Id.* P 17.

[149] *Id.* (citing *Calpine Energy Servs., L.P. v. Southern Natural Gas Co.*, 103 FERC ¶ 61,273, at P 31 (2003) (approving 30 month collateral requirement based on the risks faced by the pipeline)).

[150] *See* Pacific Connector and Jordan Cove's November 13, 2017 Answer at 33-34.

[151] *See id.* at Attachment 1.

[152] *Id.* at 34.

requirement and, thus, that its bid was improperly rejected,[153] nor does it claim that Pacific Connector's creditworthiness requirements were unreasonable.

77. Consequently, we find that Pacific Connector's request for bidders to demonstrate creditworthiness and Pacific Connector's subsequent rejection of EFG's bids, following EFG's failure to provide adequate assurances of creditworthiness, were reasonable and consistent with Commission policy. EFG's apparent inability to meet Pacific Connector's creditworthiness requirement does not constitute undue discrimination.

78. Although EFG expresses concern that Jordan Cove is potentially acting as a placeholder for prospective terminal users or other pipeline shippers, this does not mean Pacific Connector's rejection of EFG's bid was the result of undue discrimination. As explained above, the Commission's policy is not to look behind precedent agreements to evaluate shippers' business decisions to acquire capacity.[154] Jordan Cove has signed binding precedent agreements with Pacific Connector for nearly 96 percent of the pipeline's capacity and Jordan Cove has established the required credit support for the full capacity of its precedent agreements. As explained in Pacific Connector's November 13 answer, Pacific Connector required this demonstration of credit support in order to continue moving forward with development of its pipeline.[155]

79. In addition, we agree with Pacific Connector that EFG's late involvement in the open season process greatly limited Pacific Connector's ability to have any substantive discussions with EFG regarding non-conforming provisions and other matters prior to EFG submitting its bids. Further, we have no reason to doubt that, as Pacific Connector asserts, shippers similarly situated to its anchor shipper, Jordan Cove, would have been offered non-conforming provisions, but EFG's bids were rejected. We also find that EFG's inability to review Pacific Connector's tariff before submitting its bids does not render Pacific Connector's open season process discriminatory. EFG does not explain how this impacted its bids or formed a basis for Pacific Connector's denial. The record reflects that EFG's bids were rejected simply because EFG failed to adequately demonstrate creditworthiness, and, as noted by Pacific Connector, had EFG's bids been

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[153] EFG simply states "[i]t is EFG's position, that its bid in fact represented a similarly situated 'anchor shipper' bid that conformed to the requirements of the Open Season process including adequate and acceptable assurance that credit support would be furnished at the commencement of the Credit Period as required by the terms of the [Transportation Services Precedent Agreement]." EFG's October 26, 2017 Protest at 6.

[154] *See, e.g.*, *PennEast Pipeline Co., LLC*, 164 FERC ¶ 61,098, at P 16 (2018); *Spire STL Pipeline LLC*, 164 FERC ¶ 61,085, at P 83 (2018).

[155] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 30-31.

accepted, EFG would have had ample time to review and contest provisions in the *pro forma* tariff once the tariff was filed with the Commission.

80. Based on the record before us, we do not find that Pacific Connector conducted its open season in an unduly discriminatory or non-transparent manner.

### iii. Public Benefits of the Proposal

81. Sierra Club contends that even if Pacific Connector has demonstrated market support for its proposal, Pacific Connector "ha[s] not shown that the [] pipeline will provide any of the benefits contemplated by the Certificate Policy Statement."[156] Sierra Club and other intervenors allege that there are no, or few, public benefits associated with the proposal because the pipeline will be used to transport Canadian gas to the liquefaction facility, and from there the LNG will go to other foreign markets.[157] Sierra Club states that the pipeline will not reduce consumer costs or deliver any gas to communities along the pipeline route.[158] Sierra Club argues that "if the projects end up solely serving to allow a Canadian company to sell Canadian natural gas to buyers in Asian countries, the project will not provide any U.S. Community with any public benefits of the type described in the Certificate Policy Statement."[159] Sierra Club and others note that an affiliate of Jordan Cove previously received approval from DOE to import gas from Canada (for purposes of delivering that gas to Jordan Cove's previously proposed export terminal) sufficient to meet the entire supply needs of the pipeline.[160] Moreover, Sierra Club and other intervenors contend that any other purported benefits from the pipeline, such as increased tax revenue and job creation, standing alone cannot provide a basis for a grant of eminent domain authority.[161]

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[156] Sierra Club's October 26, 2017 Protest at 19.

[157] *Id.* at 21; *see also, e.g.*, Dania Colegrove's October 26, 2017 Motion to Intervene; Oregon Women's Land Trust's October 13, 2017 Motion to Intervene.

[158] Sierra Club's October 26, 2017 Protest at 19-20.

[159] *Id.* at 21.

[160] *Id.* at 20-21 (citing *Jordan Cove LNG L.P.*, FE Docket No. 13-141-LNG, Order No. 3412 (March 18, 2014)); Tienson's October 3 Landowner Comments at 2.

[161] Sierra Club's October 26, 2017 Protest at 21; *see also, e.g.*, League of Women Voters Klamath County's October 23, 2017 Motion to Intervene at 2.

82. In its November 13, 2017 answer, Pacific Connector asserts that:

> [a] broad range of public benefits may be offered as proof that a project is required by the public convenience and necessity. As the Commission has explained, '[t]he types of public benefits that might be shown are quite diverse but could include meeting unserved demand, eliminating bottlenecks, access to new supplies, lower costs to consumers, providing new interconnects that improve the interstate grid, providing competitive alternatives, increasing electric reliability, or advancing clean air objectives.[162]

Pacific Connector also notes that, although not currently proposed, the pipeline will "allow potential future deliveries to communities along the [p]ipeline that have previously not had access to clean-burning natural gas."[163]

**Commission Determination**

83. It is well established that precedent agreements are significant evidence of demand for a project.[164] As the court stated in *Minisink* and again in *Myersville Citizens for a Rural Community, Inc., v. FERC*, nothing in the Certificate Policy Statement or in any precedent construing it suggest that the policy statement requires, rather than permits, the Commission to assess a project's benefits by looking beyond the market need reflected by the applicant's precedent agreements with shippers.[165] Yet Sierra Club and others

[162] Pacific Connector and Jordan Cove's November 13, 2017 Answer at 12.

[163] *Id.* at 8-9 (citing Pacific Connector's Application at 4).

[164] Certificate Policy Statement, 88 FERC at 61,748 (precedent agreements, though no longer required, "constitute significant evidence of demand for the project"); *Sabal Trail*, 867 F.3d at 1379 (affirming Commission reliance on preconstruction contracts for 93 percent of project capacity to demonstrate market need); *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*, 783 F.3d 1301, 1311 (D.C. Cir. 2015)); *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199 at *1 (unpublished) (precedent agreements are substantial evidence of market need).

[165] *Minisink*, 762 F.3d 97, 110 n.10; *see also Myersville Citizens for a Rural Cmty., Inc., v. FERC*, 783 F.3d at 1311. Further, Ordering Paragraph (E) of this order requires that Pacific Connector file a written statement affirming that it has executed

argue the Commission must do just that: look beyond or behind the need for transportation of natural gas in interstate commerce evidenced by the precedent agreements in this proceeding (as noted above, the Jordan Cove LNG Terminal cannot function without the transportation service to be provided by the Pacific Connector Pipeline) and make a judgement based on benefits associated with where the gas might come from and/or how it will be used after it is delivered at the end of the pipeline and interstate transportation is completed. However, it is current Commission policy not to look beyond precedent or service agreements to make judgements about the origins or ultimate end use of the commodity or the needs of individual shippers,[166] and we see no justification to make an exception to that policy here. Just as the precedent agreements provide evidence of market demand, they are also evidence of the public benefits of the project.[167]

84. The principle purpose of Congress in enacting the NGA was to encourage the orderly development of reasonably priced gas supplies.[168] Thus, the Commission takes a broad look in assessing actions that may accomplish that goal. 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 scale, as the market shifts in response to weather and economic patterns.[169] Any

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contracts for service at the levels provided for in their precedent agreements prior to commencing construction.

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

[167] *See, e.g.*, *PennEast Pipeline Co., LLC*, 162 FERC ¶ 61,053, at P 42 (2018); *Columbia Gas Transmission, LLC*, 161 FERC ¶ 61,314, at P 44 (2017).

[168] *NAACP v. FPC*, 425 U.S. 662, 669-70 (1976). *See generally Adelphia Gateway, LLC*, 169 FERC ¶ 61,220 (2020) (McNamee, Comm'r, concurrence) (elaborating on the purpose of the NGA).

[169] *See, e.g.*, U.S. Energy Information Administration (EIA), *Increases in natural gas production from Appalachia affect natural gas flows* (March 12, 2019), https://www.eia.gov/todayinenergy/detail.php?id=38652 (explaining how the increase in shale gas production in the Mid-Atlantic has altered inflows and outflows of gas to the Eastern Midwest and South Central Regions, and to Canada); 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

constraint on the transportation of gas to or from points of export or import risks negating the efficiency and economy the international trade in gas provides to domestic consumers.

85. While Sierra Club is correct that an affiliate of Jordan Cove previously received authorization from DOE to import gas from Canada (for purposes of delivering that gas to Jordan Cove's previously proposed export terminal) sufficient to meet the entire supply needs of the pipeline,[170] that does not mean that the Pacific Connector Pipeline will transport only Canadian gas. As Pacific Connector explains in its application, "natural gas producers in the Rocky Mountains and Western Canada . . . . have seen their access to markets in the eastern and central regions of the United States and Canada erode with the development and ramp-up of natural gas production from the Marcellus and Utica shales."[171] Thus, domestic upstream natural gas producers will benefit from the project by being able to access additional markets for their product. The applicants have stated that they "cannot meet the gas supply needs of the [Jordan Cove LNG] Terminal and the purpose of the overall [proposed projects] without accessing U.S. Rocky Mountain supplies, which are available from the Ruby pipeline."[172] In addition, we received a number of comments regarding the benefits that the Pacific Connector Pipeline will provide to natural gas producers in the Rockies, specifically producers in the Uintah/Piceance and Green River Basins. For example, Caerus Piceance LLC, a natural gas producer in the Piceance Basin of western Colorado, states:

> The abundance of natural gas reserves in western Colorado and the existing midstream infrastructure make it possible for the Piceance Basin to be a major supplier for LNG exports worldwide via the west coast. The Piceance Basin in western Colorado has significant proven reserves—estimated at tens of thousands of future Williams Fork locations—along

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imports and higher regional prices).

[170] *See Jordan Cove LNG L.P.*, FE Docket No. 13-141-LNG, Order No. 3412 (March 18, 2014) (authorizing Jordan Cove LNG L.P. to import natural gas from Canada in a total volume of 565 Bcf per year, or 1.55 Bcf per day, for a 25-year term). The 25-year term commences on the earlier of the date of first export from Canada or the date of 10 years from the date of authorization (i.e., March 18, 2024).

[171] Pacific Connector's Application, Resource Report 1 at 3; *see also, e.g.*, State of Wyoming and Wyoming Pipeline Authority's (jointly filed) October 23, 2017 Motion to Intervene at 4-5 (noting that the Pacific Connector Pipeline will provide "much needed markets for natural gas produced in [Wyoming]").

[172] Jordan Cove and Pacific Connector's July 22, 2019 Response to Comments on draft EIS at 18.

> with tremendous potential reserves in the deeper Mancos and Niobrara formations. The existing midstream pipelines in western Colorado are currently underutilized. The [proposal] would connect the existing Ruby Pipeline to the proposed 230-mile Pacific Connector pipeline to transport affordable, clean-burning natural gas from western Colorado to the Jordan Cove LNG terminal, allowing western Colorado natural gas to flow to the Pacific without requiring additional pipeline construction.[173]

We also note that the referenced DOE import authorization acknowledges that Jordan Cove will also access gas supplies in the U.S. Rockies and that the proposed imports are "designed to create flexibility in the Project's sourcing of natural gas."[174]

86. Moreover, 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."[175] While this provision of the NGA is not directly implicated by Pacific Connector's application under NGA section 7(c), it is indicative of the importance that Congress has placed on establishing reciprocal gas trade between the United States and those countries with which it has entered free trade agreements. We further note that DOE has determined that both the import of natural gas from Canada by Jordan Cove's affiliate and the export of LNG from the Jordan Cove LNG Terminal to FTA nations by Jordan Cove are in the public interest.[176] The Pacific Connector Pipeline will provide the interstate transportation service necessary for Jordan Cove and its affiliate to perform those functions.

87. As explained further below, once the Commission makes a determination that proposed interstate pipeline facilities are in the public convenience and necessity, section 7(h) of the NGA authorizes a certificate holder to acquire the necessary land or property to construct the approved facilities by exercising the right of eminent domain if

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[173] Caerus Piceance LLC's July 8, 2019 Comments at 2.

[174] *See Jordan Cove LNG L.P.*, FE Docket No. 13-141-LNG, Order No. 3412 at 5-6 (March 18, 2014).

[175] 15 U.S.C. § 717b(a).

[176] *See Jordan Cove LNG L.P.*, FE Docket No. 13-141-LNG, Order No. 3412 at 8 (March 18, 2014); *Jordan Cove Energy Project, L.P.*, FE Docket No. 11-127-LNG, Order No. 3041-A at 4 (July 20, 2018).

it cannot acquire the easement by an agreement with the landowner.[177] Congress did not suggest that there was a further test, beyond the Commission's determination under NGA section 7(c)(e),[178] that a proposed pipeline was required by the public convenience and thus entitled to use eminent domain.

### c. Existing Pipelines and their Customers

88. The Pacific Connector Pipeline is designed to transport gas from supply basins in the U.S. Rocky Mountains and western Canada to the proposed Jordan Cove LNG Terminal. The project is not intended to replace service on other pipelines, and no pipelines or their customers have filed adverse comments regarding Pacific Connector's proposal. Several landowners assert that, because the Certificate Policy Statement requires the Commission to consider whether a new pipeline will have adverse impacts on existing pipelines, the Commission should also consider whether the Jordan Cove LNG Terminal will have adverse impacts on existing terminals on the Gulf Coast.[179] As noted above, we find that this issue of whether exports from Jordan Cove will compete with exports from LNG terminals on the Gulf Coast is beyond the Commission's purview as it relates to exportation of the commodity of natural gas.[180] Based on the foregoing, we find that the Pacific Connector Pipeline will not adversely affect other pipelines or their captive customers.

### d. Landowners and Communities

89. Regarding impacts on landowners and communities along the pipeline route, Pacific Connector proposes to locate its pipeline within or parallel to existing rights-of-way, where feasible. Approximately 43.7 percent of Pacific Connector's pipeline rights-of-way will be collocated or adjacent to existing powerline, road, and pipeline corridors.[181] 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

[177] 15 U.S.C. § 717f(h).

[178] 15 U.S.C. § 717f(e).

[179] Tienson's October 3 Landowner Comments at 2 and 4.

[180] *Supra* PP 30-32.

[181] Pacific Connector's September 18, 2019 Revised Plan of Development at 8.

land.[182] Of those 147 miles, 60 miles are held by timber companies.[183] On July 29, 2019, Pacific Connector stated that it had obtained easements from 72 percent of private, non-timber landowners (representing 75 percent of the mileage from such landowners) and 93 percent of timber company landowners (representing 92 percent of the mileage from timber companies).[184] Pacific Connector engaged in public outreach during the Commission's pre-filing process, working with interested stakeholders, soliciting input on route concerns, and engaging in reroutes where practicable to minimize impacts on landowners and communities.

90. Accordingly, while we recognize that Pacific Connector has been unable to reach easement agreements with some landowners, we find that Pacific Connector has taken sufficient steps to minimize adverse impacts on landowners and surrounding communities for purposes of our consideration under the Certificate Policy Statement.

### e. Balancing of Adverse Impacts and Public Benefits

91. Some intervenors assert that the adverse impacts associated with the proposal outweigh any public benefits, compelling denial of the application.[185] Sierra Club also contends that, while Commission practice is to generally consider all non-environmental

[182] *See* final EIS at Table 4.7.2.1-1.

[183] Pacific Connector's July 29, 2019 Land Statistics Update.

[184] *Id.* Pacific Connector provided a prior update on December 21, 2018 as part of its response to Commission Staff's December 12, 2018 Data Request. On January 2, 2019, landowner-intervenors Stacey McLaughlin, Deb Evans, and Ron Schaaf filed comments alleging that Pacific Connector had misrepresented the number of landowners with whom it had entered into easement agreements. The landowners asserted that the data provided by Pacific Connector did not match a public record search for easements recorded in the four impacted counties. On January 4, 2019, Pacific Connector filed a response, explaining it had not yet recorded all the easements it obtained and that there was no legal requirement for it to record such easements within a specific timeframe. Further, Pacific Connector stated that it was honoring multiple landowner requests to delay recording of an easement until a later date out of concerns regarding harassment by potential project opponents.

[185] *See, e.g.*, Sierra Club's October 26, 2017 Protest at 21; Tienson's June 1, 2018 Comments at 1.

issues first, environmental impacts "must be incorporated into the balancing or sliding scale assessment of the public interest."[186]

92. The Certificate Policy Statement's balancing of adverse impacts and public benefits is not an environmental analysis process, but rather an economic test that we undertake before our environmental analysis.[187]

93. The Certificate Policy Statement states that

> elimination of all adverse effects will not be possible in every instance. When it is not possible, the Commission's policy objective is to encourage the applicant to minimize the adverse impact on each of the relevant interests. After the applicant makes efforts to minimize the adverse effects, construction projects that would have residual adverse effects would be approved only where the public benefits to be achieved from the project can be found to outweigh the adverse effects.[188]

94. Pacific Connector's proposed project will enable it to transport natural gas to the Jordan Cove LNG Terminal, where the gas will be liquefied for export. Pacific Connector executed a precedent agreement with Jordan Cove for nearly 96 percent of the pipeline's capacity. The Pacific Connector Pipeline will not have any adverse impacts on existing customers, or other pipelines and their captive customers. In addition, Pacific Connector has taken steps to minimize adverse impacts on landowners and communities. For these reasons, we find that the benefits the Pacific Connector Pipeline will provide outweigh the adverse effects on economic interests.

### 3. Eminent Domain Authority

95. A number of commenters assert that is inappropriate for Pacific Connector to obtain property for the project through eminent domain because Pacific Connector is a for-profit, "Canadian company."[189] Some landowners also assert that the Commission's

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[186] Sierra Club's October 26, 2017 Protest at 6

[187] *See, e.g., Algonquin Gas Transmission, LLC*, 154 FERC ¶ 61,048, at P 245 (2016).

[188] Certificate Policy Statement, 88 FERC at 61,747.

[189] *See, e.g.*, Frank Adams's October 12, 2017 Motion to Intervene (noting he is "deeply disappointed that the United States government would allow a Canadian company to use the eminent domain to take private property . . . ."); *see also* Keri Wu's October 17, 2017 Motion to Intervene at 2 ("I object to the use of eminent domain by a foreign corporation to rob Americans of their property.").

process violates the Due Process Clause because landowners were not provided a sufficient draft EIS or an adequate opportunity to be heard prior to the taking of their property.[190]

96. First, we note that Pacific Connector is not a Canadian company; as noted above, Pacific Connector is a Delaware limited partnership, with its principal place of business in Houston, Texas, that is authorized to do business in the state of Oregon.[191] And, second, we clarify that any 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."[192] 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."[193]

97. The Commission itself does not confer eminent domain powers. 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. 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.[194] In crafting this provision, Congress made no distinction between for-profit and non-profit companies.

98. Some landowners along the pipeline route allege that the use of eminent domain to construct the pipeline would violate the Takings Clause of the Fifth Amendment of the

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[190] Tonia Moro's (writing on behalf of affected landowners Ron Schaaf, Deb Evans, Craig and Stacey McLaughlin, and Greater Good Oregon) April 19, 2019 Complaint and Motion Seeking Order at 8-11 (April 19, 2019 Landowner Motion).

[191] *Supra* P 4; Pacific Connector's Application at Exhibits A and B.

[192] *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)).

[193] *Id.* (quoting *Delaware Riverkeeper Network v. FERC*, 895 F.3d 102, 110 (D.C. Cir. 2018)).

[194] 15 U.S.C. § 717f(h).

U.S. Constitution because the project provides no public benefit.[195] These landowners further allege that the Commission's practice of issuing conditional certificates, pursuant to which projects cannot be built until additional federal and state authorizations are obtained, violates the Takings Clause as, here, it would enable Pacific Connector to obtain land via eminent domain before there is legal certainty its project can actually be built.[196]

99. The Commission has explained that, while a taking must serve a public use to satisfy the Takings Clause, the Supreme Court has defined this concept broadly.[197] Here, Congress articulated in the NGA its position 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."[198] Congress did not suggest that, beyond the Commission's determination under NGA section 7(c)(e),[199] there was a further test 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, although others did not. The power of eminent domain conferred by NGA section 7(h) is a Congressionally mandated part of the statutory scheme to regulate the transportation and sale of natural gas in interstate commerce.

100. Where the Commission determines that a proposed pipeline project is in the public convenience and necessity, it is not required to make a separate finding that the project serves a "public use" to allow the certificate holder to exercise eminent domain. In short, the Commission's public convenience and necessity finding is equivalent to a "public use" determination.

101. We also reject commenters' argument that the Commission's decision to issue a conditional certificate violates the Takings Clause of the Fifth Amendment. Pacific Connector, as a certificate holder under section 7(h) of the NGA, can commence eminent domain proceedings in a court action if it cannot acquire the 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. Because Pacific Connector may go so far as to survey and designate the

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[195] Niskanen Center's July 5, 2019 Comments at 60-62.

[196] *Id.* at 64-68.

[197] *Hawaii Housing Auth. v. Midkiff*, 467 U.S. 229 (1984).

[198] 15 U.S.C. § 717(a).

[199] *Id.* § 717f(e).

bounds of an easement but no further, e.g., it cannot cut vegetation or disturb ground pending receipt of any necessary approvals, any impacts on landowners will be minimized. Further, Pacific Connector will be required to compensate landowners for any property rights it acquires.

### 4. Blanket Certificates

102. Pacific Connector requests a Part 284, Subpart G blanket certificate in order to provide open-access transportation services. Under a Part 284 blanket certificate, Pacific Connector will not need individual authorizations to provide transportation services to particular customers. Pacific Connector filed a *pro forma* Part 284 tariff to provide open-access transportation services. Because a Part 284 blanket certificate is required for Pacific Connector to participate in the Commission's open-access regulatory regime, we will grant Pacific Connector a Part 284 blanket certificate, subject to the conditions imposed herein.

103. Pacific Connector also requests a Part 157, Subpart F blanket certificate. The Part 157 blanket certificate gives an interstate pipeline NGA section 7 authority to automatically, or after prior notice, perform a restricted number of routine activities related to the construction, acquisition, abandonment, replacement, and operation of existing pipeline facilities provided the activities comply with constraints on costs and environmental impacts.[200] Because the Commission has previously determined through a rulemaking that these blanket-certificate eligible activities are in the public convenience and necessity,[201] it is the Commission's practice to grant new natural gas companies a Part 157 blanket certificate if requested.[202] Accordingly, we will grant Pacific Connector a Part 157 blanket certificate, subject to the conditions imposed herein.[203]

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[200] 18 C.F.R. § 157.203 (2019).

[201] *Revisions to the Blanket Certificate Regulations and Clarification Regarding Rates*, Order No. 686, 117 FERC ¶ 61,074, at P 9 (2006), *order on reh'g*, Order No. 686-A, 119 FERC ¶ 61,303, *order on reh'g,* Order No. 686-B, 120 FERC ¶ 61,249 (2007).

[202] *C.f. Rover Pipeline LLC*, 161 FERC ¶ 61,244, at P 13 (2017) (denying a request for a blanket certificate where the company's actions had eroded the Commission's confidence it would comply with all the requirements of the blanket certificate program, including the environmental requirements).

[203] A commenter's request for the Commission to review environmental impacts associated with blanket certificates is discussed further below. *Infra* PP 189-190.

### 5. Rates

#### a. Initial Recourse Rates

104. Pacific Connector proposes to offer firm transportation service under Rate Schedule FT-1 and interruptible transportation service under Rate Schedule IT-1. In its application, Pacific Connector designed its rates based on a first-year cost of service of $592,859,938, utilizing a capital structure of 50 percent debt and 50 percent equity, an overall rate of return of 10.00 percent based on a 6.00 percent cost of debt and 14.00 percent return on equity, and a depreciation rate of 2.75 percent based on a 40-year depreciation life and a negative salvage rate of 0.25 percent.[204]

105. On February 16, 2018, in response to a staff data request, Pacific Connector revised its proposed cost of service and initial recourse rates to reflect changes in the federal tax code pursuant to the Tax Cuts and Jobs Act of 2017,[205] which became effective January 1, 2018.[206] Pacific Connector's work papers show that the effect of the tax code change is a reduction in its estimated first-year cost of service to $525,904,728, resulting in lower initial charges for firm and interruptible services. As the calculations in Pacific Connector's data response reflect the federal tax code that will be in effect when the project goes into service, the Commission will use the revised cost of service for the purpose of establishing the initial recourse rates.

106. Using the revised cost of service, Pacific Connector proposes an initial maximum monthly recourse reservation charge for firm transportation (FT-1) service of $36.5212 per Dth, and a usage charge for its FT-1 service of $0.0000 per Dth.[207] Pacific Connector asserts that the proposed rates reflect a straight fixed-variable (SFV) rate design, but also states that it expects to incur only a small amount of variable costs associated with

[204] Pacific Connector's Application at Exhibits O and P.

[205] Pub. L. No. 115-97, 131 Stat. 2054 (Dec. 22, 2017).

[206] On December 13, 2018, in response to a staff data request, Pacific Connector stated it is not a Master Limited Partnership and that it does not incur income taxes in its own name. Pacific Connector states its actual income tax liability ultimately will be reflected on the consolidated income tax returns of its corporate parent companies.

[207] Pacific Connector's February 16, 2018 Data Response (updated "Exhibit P, Explanatory Statement of Rate Methodology").

operating a single compressor station on its system.[208] Therefore, Pacific Connector explains that its cost of service is classified entirely as reservation charge-related.

107. Pacific Connector proposes rates for interruptible transportation (IT-1) service and authorized overrun service of $1.2007 per Dth, which is the 100 percent load factor daily equivalent of the maximum FT-1 reservation charge.

108. The Commission has reviewed Pacific Connector's proposed cost of service and initial rates and finds they generally reflect current Commission policy, with the exception of variable costs. Pacific Connector asserts that its rates reflect an SFV rate design. However, Pacific Connector does not classify any variable costs to a usage charge even though it will have two compressor units on its system.[209] Section 284.7(e) of the Commission's regulations[210] does not allow the recovery of variable costs in the reservation charge, and there is no "de minimis" cost exception to the rule. Section 284.10(c)(2) of the Commission's regulations[211] states that variable costs should be used to determine the volumetric charge. In its December 13, 2018 response to a staff data request, Pacific Connector identified a total of $1,120,000 in non-labor Operating and Maintenance expenses for FERC Account Nos. 853 (Compressor Station Labor & Expenses), 857 (Measuring and Regulating Station Expenses), 864 (Maintenance of Compressor Station Expenses) and 865 (Maintenance of Measuring and Regulating Station Equipment). These costs are properly classified as variable costs and, consistent with the Commission's regulations requiring the use of an SFV rate design methodology,[212] should be recovered through a usage charge, not through the reservation charge.[213] Therefore, the Commission approves the proposed rates, subject to modification in accordance with this discussion.

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[208] Pacific Connector's Application at Exhibit P.

[209] Pacific Connector's Application at 7-8 (both compressor units, along with a redundant spare backup unit, will be housed in a single compressor station, the Klamath Compressor Station).

[210] 18 C.F.R. § 284.7(e).

[211] 18 C.F.R. § 284.10(c)(2) (2019).

[212] 18 C.F.R. § 284.7(e).

[213] *Columbia Gulf Transmission, LLC*, 152 FERC ¶ 61,214 (2015); *Dominion Transmission, Inc*., 153 FERC ¶ 61,382 (2015).

### b. Fuel Rate

109. Pacific Connector proposes an in-kind system fuel retainage percentage with a tracking mechanism to recover fuel use and lost-and-unaccounted-for gas (L&U). Pacific Connector states that it will make a semi-annual fuel tracker filing pursuant to section 4 of the Natural Gas Act to adjust its fuel reimbursement percentage, and will annually true-up any differences between the fuel retained from shippers and the actual fuel consumed and L&U. Pacific Connector proposes an initial fuel retainage percentage of 0.8 percent, which consists of 0.719 percent for fuel use and 0.081 percent for L&U.[214] The Commission accepts Pacific Connector's proposed initial fuel retainage percentage. The proposed tracker mechanism is addressed further below.

### c. Three-Year Filing Requirement

110. Consistent with Commission precedent, Pacific Connector is required to file a cost and revenue study no later than three months after its first three years of actual operation to justify its existing cost-based firm and interruptible recourse rates.[215] In that filing, the projected units of service should be no lower than those upon which Pacific Connector's approved initial rates are based. The filing must include a cost and revenue study in the form specified in section 154.313 of the Commission's regulations to update cost of service data.[216] Pacific Connector's cost and revenue study should be filed through the eTariff portal using a Type of Filing Code 580. In addition, Pacific Connector is advised to include as part of the eFiling description a reference to Docket No. CP17-494-000 and the cost and revenue study.[217] After reviewing the data, the Commission will determine whether to exercise its authority under NGA section 5 to investigate whether the rates remain just and reasonable. In the alternative, in lieu of that filing, Pacific Connector may make an NGA general section 4 rate filing to propose alternative rates to be effective no later than three years after the in-service date for its proposed facilities.

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[214] Pacific Connector's Application at 26-27.

[215] *Florida Southeast Connection, LLC*, 154 FERC ¶ 61,080, at P 139 (2016); *Bison Pipeline LLC*, 131 FERC ¶ 61,013, at P 29 (2010); *Ruby Pipeline, L.L.C.*, 128 FERC ¶ 61,224, at P 57 (2009); *MarkWest Pioneer, L.L.C.*, 125 FERC ¶ 61,165, at P 34 (2008).

[216] 18 C.F.R. § 154.313 (2019).

[217] *Electronic Tariff Filings*, 130 FERC ¶ 61,047, at P 17 (2010).

### d. Negotiated Rates

111. Pacific Connector proposes to provide service to Jordan Cove at negotiated rates. Pacific Connector must file either its negotiated rate agreement(s) or a tariff record setting forth the essential terms of the agreement(s) in accordance with the Commission's Alternative Rate Policy Statement[218] and negotiated rate policies.[219] Pacific Connector must file the negotiated rate agreement(s) or tariff record at least 30 days, but not more than 60 days, before the proposed effective date for such rates.[220]

## 6. Tariff

112. As part of its application, Pacific Connector filed a *pro forma* open-access tariff applicable to services provided on its proposed pipeline. We approve the *pro forma* tariff as generally consistent with Commission policies, with the following exceptions. Pacific Connector is directed to include the proposed revisions in its compliance filing.

### a. Parking and Lending Service

113. The Commission's regulations provide that a pipeline with imbalance penalty provisions in its tariff must provide, to the extent operationally practicable, parking and lending or other services that facilitate the ability of shippers to manage their transportation imbalances, as well as the opportunity to obtain similar imbalance management services from other providers without undue discrimination or preference.[221] Pacific Connector's proposed General Terms and Conditions (GT&C) section 22.5

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[218] *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines; Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, *order granting clarification*, 74 FERC ¶ 61,194, *order on reh'g and clarification denied*, 75 FERC ¶ 61,024, *reh'g denied*, 75 FERC ¶ 61,066, *reh'g dismissed*, 75 FERC ¶ 61,291 (1996), *petition for review denied sub nom. Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998).

[219] *Natural Gas Pipelines Negotiated Rate Policies and Practices; Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification,* 114 FERC ¶ 61,042, *reh'g dismissed and clarification denied,* 114 FERC ¶ 61,304 (2006).

[220] Pipelines are required to file any service agreement containing non-conforming provisions and to disclose and identify any transportation term or agreement in a precedent agreement that survives the execution of the service agreement. 18 C.F.R. § 154.112(b) (2019).

[221] 18 C.F.R. § 284.12(b)(2)(iii) (2019).

contains imbalance penalty provisions. Although GT&C section 22.7 states that Pacific Connector will waive imbalance penalties incurred for certain reasons described therein or "for other good cause, including Transporter's reasonable judgment that Shipper's or Receiving Party's imbalances did not jeopardize system integrity," the possibility that Pacific Connector would waive a penalty does not satisfy the regulation's requirement to offer an operationally feasible service that would enable a shipper to avoid the penalty to begin with.[222] Therefore, Pacific Connector must either propose a parking and lending service or similar service, or fully explain and document why it is operationally infeasible to do so. In addition, Pacific Connector must state whether and how its shippers would have the opportunity to obtain such services from other providers.

### b. Index Price Point

114. Various sections of Pacific Connector's *pro forma* tariff refer to an index price point described as "Malin," published in "Platts Gas Daily." The Commission approves this point as an index price point subject to Pacific Connector revising every tariff reference to such point as it is identified in *Platts Gas Daily*: "PG&E, Malin."

115. In the Commission's *Price Index Order*,[223] the Commission stated that it will presume that a proposed index location will result in just and reasonable charges if the proposed index location meets two qualifications: (1) the index location is published by a price index developer identified in the *Price Index Order*; and (2) the index location meets one or more of the applicable criteria for liquidity (i.e., the index must be developed on a sufficient number of reported transactions involving sufficient volumes of natural gas for the appropriate review period).[224] While the Commission requires a pipeline to demonstrate the liquidity of an index location, the Commission recognizes that liquidity may fluctuate for various price indices due to constant changes in market conditions. As such, the Commission directs Pacific Connector to include in its compliance filing, a showing that its index price point meets the Commission's liquidity requirements.

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[222] *Atlantic Coast Pipeline, LLC*, 161 FERC ¶ 61,042, at PP 185-186 (citing Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services, Order No. 637, FERC Stats. & Regs. ¶ 31,091, at 31,309 (2000) (cross-referenced at 90 FERC ¶ 61,109)).

[223] *Price Discovery in Natural Gas and Electric Markets; Policy Statement on Natural Gas and Electric Price Indices*, 104 FERC ¶ 61,121 (2003), *clarified*, 109 FERC ¶ 61,184 (2004) (*Price Index Order*).

[224] *Price Index Order*, 109 FERC ¶ 61,184 at P 66 and Ordering Paragraph (D).

### c. Available Capacity (GT&C Section 9) and Right of First Refusal (GT&C Section 10)

116. GT&C section 9 describes how Pacific Connector will allocate system capacity, conduct open season bidding for capacity, implement prearranged transactions, and reserve existing capacity for future expansions. GT&C section 10 includes additional open season procedures if capacity posted for bidding under GT&C section 9 is subject to a right of first refusal (ROFR) under section 284.221(d)(2)(ii) of the Commission's regulations (hereinafter, ROFR capacity).[225] As detailed below, portions of GT&C sections 9 and 10 are inconsistent with Commission policy and precedent.

#### i. Prearranged Transactions (GT&C Section 9.5)

117. GT&C section 9.5 provides that Pacific Connector "may enter into a prearranged transaction with any creditworthy party for any Available Capacity or potentially Available Capacity" as defined in GT&C section 9.1.2. GT&C section 9.1.2 defines potentially available capacity to include "capacity that may be made available at a future date" if Pacific Connector exercises its option to provide a termination notice under a firm service agreement with an evergreen provision, or terminate a shipper's service agreement pursuant to GT&C section 8.2 for failure to maintain credit or pursuant to GT&C section 24.3.3 for failure to pay bills.

118. Section 9.2.1 requires Pacific Connector to post information about all Available Capacity within 10 business day of becoming aware of such availability. Section 9.2.2 requires Pacific Connector to post information about potentially Available Capacity, including capacity that may become available as a result of the pipeline's option to terminate under an evergreen provision or for failure to maintain credit or pay bills.

119. According to GT&C section 9.5, a prospective prearranged shipper may propose to enter into a transaction with Pacific Connector by submitting a binding "prearranged offer request" for any Available Capacity or potentially Available Capacity that the pipeline has posted pursuant to section 9.2. GT&C section 9.5 states that Pacific Connector will reject any prearranged offer request for Available Capacity or "potentially Available Capacity currently held by a Shipper with a Right of First Refusal" when such offer request is submitted more than eighteen months before the termination date or "potential termination date" of the existing shipper's service agreement. The pipeline may also reject any prearranged offer request for potentially Available Capacity requested with conditions or at less than the maximum rate. If the offer request is deemed acceptable, Pacific Connector will provide a termination notice to any existing shipper whose capacity is included in the prearranged offer request and thereafter post the

[225] 18 C.F.R. § 284.221(d)(2)(ii) (2019). A shipper holding ROFR capacity is referred to herein as a ROFR shipper.

prearranged transaction for open season bidding.

120. After the open season, the prearranged shipper will be awarded the capacity if the agreed-to prearranged transaction rate exceeds or matches the economic value of the best third-party bid. However, if the prearranged transaction includes ROFR capacity, the ROFR shipper will have the ultimate right to match either the best third-party bid or the prearranged transaction rate in order to retain its capacity.

121. The Commission rejects Pacific Connector's proposal to permit prearranged transactions to include ROFR capacity. In *PG&E Gas Transmission*, the Commission held that a pipeline "cannot enter into any prearranged deals before capacity is posted as available."[226] Because section 284.221(d)(2) of the Commission's regulations[227] gives eligible shippers a regulatory right to request an open season to potentially avoid pregranted abandonment of their ROFR capacity, ROFR capacity cannot be considered available. For this reason, such capacity cannot be included in a prearranged transaction until the ROFR shipper either relinquishes its right to compete in an open season for the capacity, or otherwise fails or chooses not to retain such capacity at the conclusion of an open season.[228]

122. Therefore, the Commission directs Pacific Connector to remove any language from its proposed tariff indicating that ROFR capacity can be included in a prearranged transaction.[229]

### ii. Posting Prearranged Transactions (GT&C Section 9.5)

123. GT&C section 9.5 states, in part, that "the first prearranged offer request that is acceptable to Transporter will be posted as a prearranged transaction pursuant to Section 9.6 and will be subject to competitive bid." However, GT&C Section 9.5 does not provide a deadline by which Pacific Connector must post the prearranged transaction. Commission policy requires a pipeline to post the prearranged deal as soon as it is entered into to permit other parties an opportunity to bid for the capacity on a long-term

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[226] *PG&E Gas Transmission, Northwest Corp.*, 103 FERC ¶ 61,061, at P 12 (2003) (*PG&E*).

[227] 18 C.F.R. § 284.221(d)(2) (2019).

[228] *See Natural Gas Pipeline Co. of Am.*, 82 FERC ¶ 61,036, at 61,142 (1998).

[229] For example, GT&C section 12.2(b), addressing negotiated rates, notes that prearranged transactions may include potentially available capacity.

basis.[230] Pacific Connector is directed to revise GT&C Section 9.5 to be consistent with this policy.

### iii. Bids for Capacity for Service with a Future Start Date (GT&C Section 9.9.1)

124. GT&C section 9.8.1 states in part:

> [F]or a prearranged transaction for service commencing at a future date at any rate, competing bids will be allowed for service to start either on such future date or on any date between the earliest time the capacity is available and such future date.

125. In addition, GT&C section 9.9.1 provides:

> [F]or prearranged transactions starting a year or more after the underlying capacity becomes available, Transporter will evaluate bids based on net present value of the reservation charge bid for new [Contract Demand] and/or term extension bid for existing Service Agreements.
> . . . .
> When the net present value methodology is utilized, the net present value will be computed *from the Monthly reservation revenues per Dekatherm to be received over the term of the Service Agreement*. (Emphasis added).

126. Commission policy requires that bids for prearranged transactions reserving capacity for future service must be evaluated on a net present value (NPV) basis,[231] and that "[i]n calculating net present value, the current value of the future bid would be reduced by the time value of the delay in the pipeline receiving that revenue."[232] The Commission therefore directs Pacific Connector to revise the italicized language quoted above from GT&C section 9.9.1 to be consistent with such policy.

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[230] *Gas Transmission Northwest Corp.*, 109 FERC ¶ 61,141, at P 17 (2004) (*GTN*); *Northern Natural Gas Co.*, 109 FERC ¶ 61,388, at P 27 (2004) (*Northern*).

[231] *Northern*, 109 FERC ¶ 61,388 at P 27.

[232] *GTN*, 109 FERC ¶ 61,141 at P 17; *see also Northern*, 109 FERC ¶ 61,388 at P 27.

### iv. Open Season for ROFR Capacity (GT&C Section 10.4)

127. GT&C section 10.4 (Solicitation of Bids) states:

> Pursuant to Section 9, Transporter may enter into prearranged deals which will be subject to competitive bid, or hold an open season for capacity that is subject to a ROFR, no earlier than eighteen (18) Months prior to the termination or expiration date or potential termination date for the eligible Service Agreement. An open season for capacity that is subject to a ROFR shall commence no later than one hundred and eighty (180) days prior to the expiration of the current Service Agreement and last at least twenty (20) days.

128. In *Transcontinental Gas Pipe Line Corp.*, the Commission stated that "[u]nder the ROFR [process], a reasonable period before a contract ends, normally six months to a year, a shipper would provide notice to the pipeline stating whether or not it was interested in renewing its contract."[233] Pacific Connector is directed to revise its open season process for ROFR capacity to be consistent with the timeframe found reasonable by the Commission in *Transco I*.

### v. Match Process for ROFR Shippers (GT&C Section 10.7)

129. GT&C section 10.7 states, in part:

> (a) if the best bid is a Recourse Rate bid, Shipper must match both the rate and term of the bid for all or a volumetric portion of the bid;
>
> (b) if the best bid is a discounted Recourse Rate bid, Shipper must offer a rate and term (*not to exceed the term for such bid*) equivalent to all or a volumetric portion of the bid on a net present value basis; or
>
> (c) if the best bid is a Negotiated Rate bid, Shipper can either match the Negotiated Rate and term or agree to pay the Recourse Rate for the bid term for all or a volumetric portion of the bid. (Emphasis added).

130. In *Transcontinental Gas Pipe Line Corp.*, the Commission determined that "[u]nder an NPV bid evaluation method, shippers may bid whichever combination of rate

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[233] *Transcontinental Gas Pipe Line Corp.*, 103 FERC ¶ 61,295, at P 20 (2003) (*Transco I*).

and term best represents the value they place on the capacity."[234] The Commission directs Pacific Connector to revise the above-quoted italicized language from GT&C section 10.7(b) to be consistent with the Commission's determination in *Transco II*.

#### vi. Open Season Procedural Timeframes (GT&C Sections 9 and 10)

131. GT&C sections 9 and 10 do not specify time limits within which Pacific Connector must evaluate and determine the best bids, or within which it must notify either the prearranged shipper or ROFR shipper of its determination. Similarly, although the ROFR shipper must execute a service agreement within five days after receiving notification that it has been awarded capacity, there is no deadline by which Pacific Connector must proffer the agreement for execution. Pacific Connector is directed to state deadlines for such actions that are within the range of deadlines previously approved by the Commission.

#### vii. Reserved Capacity (GT&C Section 9.10)

132. GT&C section 9.10 provides that Pacific Connector may reserve capacity for expansion projects. This proposal is generally consistent with Commission policy. However, pipelines considering an expansion project involving reserved capacity must offer existing shippers the opportunity for a non-binding solicitation of turned-back capacity, so that any turned back capacity may substitute for the expansion capacity, thereby minimizing the size of the expansion.[235] The solicitation of turned-back capacity should occur either as part of, or close in time to, the open season for the expansion project, since that is when the size of the project is being assessed. Therefore, Pacific Connector is directed to incorporate a turnback solicitation process into its capacity reservation proposal consistent with Commission policy.

### d. Fuel Reimbursement Tracking Mechanism (GT&C Section 17)

133. Pacific Connector proposes in-kind recovery of gas used for fuel in providing transportation service and L&U gas, by retaining a percentage of receipts. Pacific Connector states that it will make semi-annual fuel tracker filings pursuant to section 4 of the NGA to adjust its fuel reimbursement percentage, and will annually true-up any

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[234] *Transcontinental Gas Pipe Line Corp.*, 105 FERC ¶ 61,365, at P 20 (2003) (*Transco II*).

[235] *Florida Gas Transmission Co., LLC*, 136 FERC ¶ 61,008, at P 26 (2011); *Iroquois Gas Transmission Sys.*, 100 FERC ¶ 61,279, at P 8 (2002).

differences between the fuel retained from shippers and the actual fuel consumed and L&U.[236]

134. GT&C section 17 sets forth Pacific Connector's fuel tracking mechanism, which also includes a surcharge for tracking and reconciling the difference between actual and retained fuel use and L&U gas. GT&C section 17.3(b) states that at least thirty days prior to the effective date of each fuel adjustment filing, "Transporter shall file with the Commission and post, as defined by 18 CFR § 159.2(d) (sic), a schedule of the effective Fuel Reimbursement Percentage. With respect to the adjustment described herein, *such filing shall be in lieu of any other rate change filing required by the Commission's regulations under the Natural Gas Act.*" (Emphasis added).

135. GT&C section 17 is generally consistent with Commission precedent, except for GT&C section 17.3(b). The emphasized language quoted above could be interpreted as permitting Pacific Connector to adjust its fuel reimbursement percentage only by posting and filing with the Commission a schedule of such changes, rather than, as represented in its application, making a limited NGA section 4 rate filing that proposes and supports such changes, thereby giving shippers an opportunity to review and challenge the basis for the changes. Fuel retention charges are rates under the NGA. Posting and filing changed rates cannot be in lieu of any other rate change filing proposal required by NGA section 4. Pacific Connector is directed to revise GT&C section 17.3(b) to be consistent with Commission precedent.[237]

### e. Imbalances (GT& C Section 22)

136. GT&C section 22.4 defines a shipper imbalance as the difference between the "aggregate Scheduled Quantity for receipt, net of the associated Fuel Reimbursement, under a Shipper's Service Agreement on any Gas Day and the aggregate Scheduled Quantity for delivery under such Service Agreement on such Gas Day." The Commission has held that imbalance calculations should be based on the difference between actual rather than scheduled volumes.[238] Pacific Connector is directed to revise GT&C section 22.4 accordingly.

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[236] Pacific Connector's Application at 27.

[237] *See Rover Pipeline LLC*, 158 FERC ¶ 61,109, at P 140 (2017).

[238] *Algonquin Gas Transmission Co.*, 62 FERC ¶ 61,132, at 61,892 (1993); *Texas Eastern Transmission Corp.*, 62 FERC ¶ 61,015, at 61,117 (1993).

### f. Imbalances and Penalties (GT&C Section 22)

137. GT&C section 22.1 provides in part that "Transporter *may in its discretion* enter into [Operational Balancing Agreements (OBAs)] with upstream and downstream interconnecting parties (hereinafter referred to as an 'OBA Party')." (Emphasis added). Further, GT&C section 22.1 lists five conditions under which Pacific Connector would have no obligation to negotiate and execute OBAs with any OBA Party. However, North American Energy Standards Board (NAESB) Wholesale Gas Quadrant (WGQ) Flowing Gas Related Standard 2.3.29 provides that "[a]t a minimum, [pipeline] should enter into [OBAs] at all pipeline-to-pipeline (interstate and intrastate) interconnects." In addition, section 284.12(b)(2)(i) of the Commission's regulations provides that "[a] pipeline *must* enter into [OBAs] at all points of interconnection between its system and the system of another interstate or intrastate pipeline." (Emphasis added). Accordingly, Pacific Connector is directed to revise its tariff to comply with NAESB WGQ Flowing Gas Related Standard 2.3.29 and section 284.12(b)(2)(i) of the Commission's regulations.[239]

### g. Interruptible Revenue Credits (GT&C Section 26)

138. The Commission's policy regarding new interruptible services requires either a 100 percent crediting of the interruptible revenues, net of variable costs, to maximum rate firm and interruptible customers or an allocation of costs and volumes to these services.[240] Moreover, the Commission has clarified that a pipeline and its negotiated rate customers may agree in their contracts to allow for crediting and sharing of a proportionate amount of interruptible revenues collected by the pipeline, subject to eligible recourse rate shippers receiving a proportionate share of 100 percent of the interruptible revenues collected.[241]

139. Pacific Connector does not propose to allocate any costs to interruptible service. Instead, GT&C section 26 provides for an interruptible revenue crediting mechanism, and states in part:

> 26.1 Applicability
>
> Transporter will credit to eligible Shippers all revenue it receives under Rate Schedule IT-1 during a calendar year, net of any incremental cost-of-

[239] 18 C.F.R. § 284.12(b)(2)(i) (2019). With these changes, the five conditions under which Pacific Connector would have no obligation to negotiate and execute OBAs will not be applicable to an interconnection with another interstate or intrastate pipeline.

[240] *Corpus Christi*, 149 FERC ¶ 61,283, at P 38.

[241] *Wyoming Interstate Co., Ltd.*, 121 FERC ¶ 61,135, at P 11 (2007) (*Wyoming*).

> service incurred to generate such revenues, *that is in excess of any shortfall during such calendar year in Transporter's recovery of the Commission-approved cost-of-service level for Rate Schedule FT-1 design capacity underlying its currently effective Recourse Rates* which is not contractually committed under Negotiated Rates. The Shippers eligible to be credited a share of any such excess interruptible revenue are all Shippers with Service Agreements under Rate Schedule FT-1 and Rate Schedule IT-1 for service at the maximum Recourse Rate ("Eligible Recourse Rate Shippers") and Shippers with Service Agreements under Rate Schedule FT-1 for service at a Negotiated Rate ("Eligible Negotiated Rate Shippers").
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> 26.2 Allocation and Distribution of Credits
>
> Eligible Recourse Rate Shippers will be allocated pro rata shares based on amounts paid to Transporter of Transporter's excess interruptible revenue based on revenues received by Transporter during the calendar year under each Eligible Recourse Rate Shipper's Service Agreement, *net of credits from Capacity Releases*. *Unless otherwise provided in an Eligible Negotiated Rate Shipper's Service Agreement, Eligible Negotiated Rate Shippers will be allocated fifty percent (50%) of their pro rata shares of Transporter's excess interruptible revenue based on revenues received by Transporter during the calendar year under each Eligible Negotiated Rate Shipper's Service Agreement, and Transporter shall retain the remaining fifty percent (50%).* (Emphasis added).

140. In GT&C section 26.1 quoted above, the underlined phrase is unclear and could be interpreted as reducing creditable revenues by more than the reduction for variable costs allowed under the above-stated Commission policy. Moreover, the italicized language in GT&C section 26.1 implies that Pacific Connector could delay crediting interruptible revenues until it meets the revenue requirements associated with recourse rate service. The Commission has prohibited pipelines from making the crediting of interruptible revenues contingent on recovering the revenue requirements underlying their firm service rates.[242] Therefore, Pacific Connector should revise GT&C section 26.1 by deleting the underlined and italicized language above. Also, if Pacific Connector believes that it will not be able to meet its revenue requirements, it has the option to file an NGA section 4 rate case to address that issue.

141. In addition, the Commission has held that a pipeline may agree to provide shippers paying negotiated rates with interruptible revenue credits after eligible recourse rate shippers have been credited with 100 percent of interruptible revenues net of variable

[242] *Sonora Pipeline, LLC*, 120 FERC ¶ 61,032, at P 28 (2007).

costs.[243] However, negotiated rate shippers may receive such credits as a component of an individually negotiated rate rather than by virtue of the Commission's policy on interruptible revenue crediting. Accordingly, as provisions of a negotiated rate, such credits are required to be reported in a negotiated rate tariff filing. Therefore, we direct Pacific Connector to remove from GT&C section 26.1 all references to the eligibility of negotiated rate shippers to receive interruptible revenue credits, and also the italicized language above from GT&C section 26.2.

### h. NAESB WGQ Standards (GT&C Section 27)

142. GT&C section 27.1 implements the NAESB WGQ Version 3.0 business practice standards that the Commission incorporated by reference in its regulations. In the time since Pacific Connector filed its proposed tariff in this proceeding, the Commission amended its regulations to incorporate by reference, with certain enumerated exceptions, the NAESB WGQ Version 3.1 business practice standards.[244] Thus, we direct Pacific Connector to filed revised tariff records, no less than 30 days prior to its in-service date, implementing the NAESB WGQ Version 3.1 business practice standards or, if applicable, the latest future version of the NAESB WGQ standards adopted by the Commission. Further, Pacific Connector is directed to revise its tariff to:

> (1) Revise GT&C section 15.2(b), Nomination, Confirmation and Scheduling Timelines – Evening Nomination Cycle (time on Day prior to flow Day), to provide that "Scheduled Quantities available to Shippers and point operators, including bumped parties (notice to bumped parties): 9:00 P.M.;"
>
> (2) Include a new section GT&C 15.2(d), Nomination, Confirmation and Scheduling Timelines, to provide that for purposes of GT&C sections 15.2(b) and (c), the word "provides" shall mean, for transmittals pursuant to NAESB WGQ Standards 1.4.x, receipt at the designated site, and for purposes of other forms of transmittal, it shall mean send or post;
>
> (3) Change the reference from standard "1.3.2(i-v)" to "1.3.2(i-vi)" in the section titled "Standards not Incorporated by Reference and their Location

[243] *Wyoming*, 121 FERC ¶ 61,135 at P 11.

[244] *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587-Y, 165 FERC ¶ 61,109 (2018). Under Order No. 587-Y, interstate natural gas pipelines are required to file compliance filings with the Commission by April 1, 2019, and are required to comply with the Version 3.1 standards incorporated by reference in this rule on and after August 1, 2019.

in the Tariff:" in GT&C section 27.1, NAESB WGQ Business Practice Standards;

(4) Change the reference from "Tariff Provision 15.3" to "Tariff Provision 15.2" in the section titled "Standards not Incorporated by Reference and their Location in the Tariff:" in GT&C section 27.1, NAESB WGQ Business Practice Standards;

(5) Change the reference from "GT&C Section 14, Capacity" to "GT&C Section 14, Capacity Release" in the section titled "Standards not Incorporated by Reference and their Location in the Tariff:" in GT&C section 27.1, NAESB WGQ Business Practice Standards;

(6) Add standard "2.3.29" to the section titled "Standards not Incorporated by Reference and their Location in the Tariff:," and identify the tariff record in which the standard is located, in GT&C section 27.1, NAESB WGQ Business Practice Standards;

(7) Change the reference from standard "0.4.1*" to "0.4.4" in the section titled "Location Data Download: - Data Set:" in GT&C section 27.1, NAESB WGQ Business Practice Standards; and

(8) Remove standard "2.3.29" from the section titled "Flowing Gas Related Standards" in GT&C section 27.1, NAESB WGQ Business Practice Standards.

### 7. Request for Waiver of Segmentation

143. Pacific Connector requests waiver of section 284.7(d) of the Commission's regulations,[245] which requires pipelines to offer shippers the ability to segment their capacity to the extent operationally feasible. Pacific Connector asserts that it is not proposing to offer segmentation rights on its system because segmentation is not operationally feasible, noting that it will receive gas from adjacent, receipt-only interconnections with upstream pipelines and transport the gas to a single delivery point at the Jordan Cove LNG Terminal.[246] Further, Pacific Connector explains that there are no intermediate points on its system between its two receipt points near Malin and its sole delivery point. Pacific Connector contends that the Commission has granted waiver of segmentation for similarly structured pipelines. In addition, Pacific Connector states that, to the extent it becomes capable of providing segmentation in the future and a party

[245] 18 C.F.R. § 284.7(d).

[246] Pacific Connector's Application at 28.

requests segmentation, it will consider such request.[247] Finally, Pacific Connector notes that Jordan Cove, as the sole anchor shipper, has not requested segmentation.

144. Based on Pacific Connector's proposed configuration, we will grant Pacific Connector a limited waiver from implementing segmentation on its system. The Commission has held that segmentation of the type contemplated by the regulations is not feasible on a pipeline that has only one delivery point, because there is no way for two transactions to simultaneously occur using different receipt and delivery points, as required for segmentation.[248] If additional points are added to its system that would make segmentation feasible, Pacific Connector must file new or revised tariff records in accordance with the Commission's regulations to provide for segmentation and flexible point rights.

### 8. Non-conforming Provisions

145. As noted above, Pacific Connector executed two precedent agreements with Jordan Cove, as the Pacific Connector's anchor shipper, for 95.8 percent of the pipeline's capacity. According to Pacific Connector, the precedent agreements require Jordan Cove to execute corresponding Firm Transportation Agreements and Negotiated Rate Agreements. Pacific Connector states that those agreements differ in certain aspects from the *pro forma* Rate Schedule FT-1 transportation service agreement in its tariff. Pacific Connector requests that the Commission approve these non-conforming provisions.

146. Specifically, Pacific Connector requests approval of the following non-conforming provisions:

- in both agreements, creditworthiness provisions that differ from the tariff;
- in one of the agreements, a provision allowing Jordan Cove to extend the term of the agreement for two additional ten-year periods;
- in one of the agreements, an evergreen provision with a one-month rollover period; and

[247] *Id.* at 28 n.37.

[248] *Venice Gathering Sys., L.L.C.*, 98 FERC ¶ 61,234 (2002); *Gulf States Transmission Corp.*, 96 FERC ¶ 61,159, at 61,693 (2001).

- in both agreements, a provision that Jordan Cove's aggregate firm daily quantity at primary receipt points may exceed Jordan Cove's contract demand.[249]

147. Pacific Connector asserts that none of these provisions are unduly discriminatory, and that, under the Commission's existing policy, project sponsors are permitted to provide rate incentives to anchor shippers on a number of grounds. Pacific Connector states that the Commission regularly approves separate credit provisions applicable to anchor shippers because of the financial commitment involved in construction of new facilities. In addition, Pacific Connector notes that the Commission has approved non-conforming provisions giving extension and rollover rights to anchor customers, again in recognition of their early commitment that enables new projects to move forward. Pacific Connector argues that the Commission should approve the provision related to aggregate primary receipt point rights because pipelines regularly allow such excess receipt point rights. Finally, Pacific Connector maintains that because no shipper is similarly situated to Jordan Cove, there is no risk of undue discrimination.[250]

148. If a pipeline and a shipper enter into a contract that materially deviates from the pipeline's form of service agreement, the Commission's regulations require the pipeline to file the contract containing the material deviations with the Commission.[251] In *Columbia Gas Transmission Corp.* (*Columbia II*), the Commission clarified that a material deviation is any provision in a service agreement that: (1) goes beyond filling in the blank spaces with the appropriate information allowed by the tariff; and (2) affects the substantive rights of the parties.[252] The Commission prohibits negotiated terms and conditions of service that result in a shipper receiving a different quality of service than that offered other shippers under the pipeline's generally applicable tariff or that affect the quality of service received by others.[253] However, not all material deviations are impermissible. As the Commission explained in *Columbia II*, provisions that materially deviate from the corresponding *pro forma* agreement fall into two general categories: (1) provisions the Commission must prohibit because they present a significant potential

[249] Pacific Connector's Application at 29.

[250] *Id.* at 30.

[251] 18 C.F.R. §§ 154.1(d), 154.112(b).

[252] *Columbia Gas Transmission Corp.*, 97 FERC ¶ 61,221, at 62,002 (2001) (*Columbia II*).

[253] *Monroe Gas Storage Co., LLC*, 130 FERC ¶ 61,113, at P 28 (2010).

for undue discrimination among shippers; and (2) provisions the Commission can permit without a substantial risk of undue discrimination.[254]

149. The Commission finds that the identified non-conforming provisions in Jordan Cove's precedent agreements do constitute material deviations from Pacific Connector's *pro forma* form of FT-1 service agreement. However, in other proceedings, the Commission has found that non-conforming provisions may be necessary to reflect the unique circumstances involved with the construction of new infrastructure and to provide the needed security to ensure the viability of a project.[255] We find the non-conforming provisions identified by Pacific Connector are permissible because they do not present a risk of undue discrimination, do not adversely affect the operational conditions of providing service, and do not result in any customer receiving a different quality of service.[256] As discussed further below, when Pacific Connector files its non-conforming service agreements, we require Pacific Connector to identify and disclose all non-conforming provisions or agreements affecting the substantive rights of the parties under the tariff or service agreement. This required disclosure includes any such transportation provision or agreement detailed in a precedent agreement that survives the execution of the service agreement.

150. At least 30 days, but not more than 60 days, before providing service to any project shipper under a non-conforming agreement, Pacific Connector must file an executed copy of the non-conforming agreement and identify and disclose all non-conforming provisions or agreements affecting the substantive rights of the parties under the tariff or service agreement. Consistent with section 154.112 of the Commission's regulations, Pacific Connector must also file a tariff record identifying the agreements as non-conforming agreements.[257] In addition, the Commission emphasizes that the above determination relates only to those items publicly included by Pacific Connector in its application and not to the entirety of the corresponding precedent agreement or transportation service agreement.[258]

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[254] *Columbia II*, 97 FERC at 62,003-04; *see also Equitrans, L.P.*, 130 FERC ¶ 61,024, at P 5 (2010).

[255] *See, e.g.*, *Tennessee Gas Pipeline Co., L.L.C*, 144 FERC ¶ 61,219 (2013); *Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089 (2008).

[256] *See, e.g.*, *Columbia Gulf Transmission, LLC*, 152 FERC ¶ 61,214; *Transcontinental Gas Pipe Line Co., LLC*, 145 FERC ¶ 61,152, at P 34 (2013).

[257] 18 C.F.R. § 154.112.

[258] A Commission ruling on non-conforming provisions in a certificate proceeding does not waive any future review of such provisions when the executed copy of the non-

### 9. Accounting

151. Allowance for Funds Used During Construction (AFUDC) is a component of the overall construction cost for Pacific Connector's facilities. Gas Plant Instruction No. 3(17) of the Commission's accounting regulations prescribes a formula for determining the maximum amount of AFUDC that may be capitalized.[259] That formula, however, is not applicable here as it uses prior year book balances and cost rates of borrowed and other capital that either do not exist or could produce inappropriate results for initial construction projects of newly created entities such as Pacific Connector. Accordingly, to ensure that AFUDC is properly capitalized for this project, we will require Pacific Connector to capitalize the actual costs of borrowed and other funds for construction purposes, not to exceed the amount of AFUDC that would have been capitalized using the approved overall rate of return.[260]

## V. Environmental Analysis

152. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),[261] Commission staff evaluated the potential environmental impacts of the proposed projects in an EIS. Several entities participated as cooperating agencies in the preparation of the EIS: the U.S. Department of the Interior, Bureau of Land Management (BLM), Bureau of Reclamation (Reclamation), and Fish and Wildlife Service (FWS); U.S. Department of Agriculture, Forest Service (Forest Service); DOE; U.S. Army Corps of Engineers (Corps); U.S. Environmental Protection Agency (EPA); U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services (NMFS); U.S. Department of Homeland Security, Coast Guard (Coast Guard); PHMSA; and the Coquille Indian Tribe. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by the proposals and participate in the NEPA analysis.

153. On March 29, 2019, Commission staff issued a draft EIS addressing issues raised up to the point of publication. Notice of the draft EIS was published in the Federal

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conforming agreement(s) and a tariff record identifying the agreement(s) as non-conforming are filed with the Commission, consistent with section 154.112 of the Commission's regulations. *See, e.g., Tennessee Gas Pipeline Co., L.L.C.*, 150 FERC ¶ 61,160, at P 44 n.33 (2015).

[259] 18 C.F.R. pt. 201 (2019).

[260] *See Weaver's Cove Energy, LLC.*, 112 FERC ¶ 61,070 (2005).

[261] 42 U.S.C. §§ 4321 *et seq.* (2018). *See also* the Commission's NEPA-implementing regulations at Title 18 of the Code of Federal Regulations, Part 380.

Register on April 5, 2019, establishing a 90-day comment period ending on July 5, 2019.[262] Commission staff held four public comment sessions[263] between June 24 and June 27, 2019, to receive comments on the draft EIS.[264] Between issuance of the draft EIS and the end of the comment period on July 5, 2019, the Commission received 1,449 individual comment letters[265] from federal, state, and local agencies; Native American tribes; elected officials; companies/organizations; and individuals in response to the draft EIS.[266]

154. On November 15, 2019, Commission staff issued the final EIS for the projects, which addresses all substantive environmental comments received on the draft EIS.[267] The final EIS addresses geology; soils; water resources; wetlands; vegetation; wildlife and aquatic resources; threatened, endangered, and other special status species; land use; recreation and visual resources; socioeconomics; transportation; cultural resources; air quality and noise; reliability and safety; cumulative impacts; and alternatives.

155. The final EIS concludes that construction and operation of the projects would result in temporary, long-term, and permanent environmental impacts. Many of these impacts would not be significant or would be reduced to less-than-significant levels with the implementation of the applicants' proposed and Commission staff's recommended avoidance, minimization, and mitigation measures, which are included as conditions in the appendix to this order. However, some of the environmental impacts would be significant. Specifically, simultaneous construction of the Jordan Cove LNG Terminal and the Pacific Connector Pipeline would result in temporary but significant impacts on the short-term housing market in Coos County; construction of the Jordan Cove LNG Terminal would result in temporary but significant noise impacts in the Coos Bay area; and construction and operation of the Jordan Cove LNG Terminal would result in

[262] 84 Fed. Reg. 13,648.

[263] Commission staff held the public comment sessions in Coos Bay, Myrtle Creek, Medford, and Klamath Falls, Oregon.

[264] Transcripts for the public comment sessions were placed in the public record for the proceedings.

[265] Some of the filings combined letters from multiple agencies or individuals and are considered one single comment letter for purposes of this total.

[266] The Commission received additional comments on the draft EIS after the close of the comment period, which were addressed in the final EIS to the extent practicable.

[267] Final EIS at Appendix R.

permanent and significant impacts on the visual character of Coos Bay.[268] Additionally, Commission staff determined that construction and operation of the Jordan Cove LNG Terminal and the Pacific Connector Pipeline would adversely affect federally listed threatened and endangered species, including the marbled murrelet, northern spotted owl, and coho salmon, and would likely adversely affect critical habitat designated for some species. Additionally, construction of the projects would adversely affect historic properties.

156. Between issuance of the final EIS and December 31, 2019, the Commission received comments on the final EIS from the applicants, two individuals, the Pacific Fishery Management Council, EPA, Oregon Department of Justice (on behalf of certain Oregon state agencies), and the Cow Creek Band of Umpqua Tribe of Indians.[269] In addition, on February 20, 2020, the Oregon Department of Land Conservation and Development (Oregon DLCD) filed its federal consistency determination pursuant to the Coastal Zone Management Act (CZMA), which discussed its findings regarding the direct, indirect, and cumulative effects of the projects on the coastal zone. The comments on the final EIS and Oregon DLCD's comments, the major environmental issues addressed in the final EIS, and a variety of issues relating to the NEPA process, scope of the EIS, and conditional certificates are all discussed below.

## A. Issues Relating to the NEPA Process, Scope of the EIS, and Conditional Certificates

### 1. Arguments Regarding the NEPA Process

157. We received several comments, including a motion filed by affected landowners, concerning the NEPA process. First, a number of entities requested an extension of the draft EIS comment period.[270] The Commission's standard draft EIS comment period is 45 days, which is consistent with the Council for Environmental Quality's (CEQ) regulations implementing NEPA.[271] However, to accommodate the needs of BLM and

[268] The final EIS also determined that operation of the Jordan Cove LNG Terminal could significantly impact the Southwest Oregon Regional Airport. Based on determinations made by the FAA after issuance of the final EIS, we no longer conclude the project could significantly impact the airport. *See infra* PP 244- 247.

[269] During this time, the Commission also received courtesy copies of comments filed to other federal and state agencies with permitting authority over the proposals. Those comments are not addressed below.

[270] *See, e.g.*, April 19, 2019 Landowner Motion at 3.

[271] 40 C.F.R. § 1506.10(c) (2019).

the Forest Service, Commission staff issued the draft EIS for the Jordan Cove LNG Terminal and Pacific Connector Pipeline with a 90-day comment period. We feel that 90 days was sufficient time to review and comment on the draft EIS. Moreover, as noted above, in preparing the final EIS, Commission staff considered late-filed comments on the draft EIS to the extent practicable.[272]

158. Second, commenters also took issue with the Commission not providing paper copies of the draft EIS to landowners and other entities interested in reviewing the document.[273] The Commission mailed a copy of the Notice of Availability of the draft EIS to federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Indian Tribes; potentially affected landowners and other interested individuals and groups; and newspapers and libraries in the area of the projects. This notice explained that the draft EIS was available in electronic format on the Commission's website. In addition, paper copies of the draft EIS were made available for inspection in public libraries in Coos, Douglas, Jackson, and Klamath Counties. The Commission is not required, pursuant to NEPA or the Commission's regulations, to provide paper copies of the draft EIS.

159. Lastly, some commenters allege that the draft EIS was deficient because it contained errors[274] or because it had "substantial information gaps"[275] that precluded meaningful public participation in the NEPA process. Commenters contend that examples of missing or incomplete information in the draft EIS include Commission staff's Biological Assessment (prepared to initiate formal consultation with FWS and NMFS under the Endangered Species Act),[276] incomplete or draft plans regarding

[272] *See supra* note 266.

[273] *See, e.g.*, April 19, 2019 Landowner Motion at 10.

[274] *See id.* at 4-7.

[275] *See, e.g.*, Snattlerake's July 5, 2019 Comments at 17.

[276] *See, e.g.*, Western Environmental Law Center, et al.'s (jointly filed) July 3, 2019 Comments at 289-90 (WELC's July 3, 2019 Comments). While we acknowledge that Commission staff's Biological Assessment was not available for review during the draft EIS comment period, it was placed in the public record (and submitted to FWS and NMFS) shortly after the close of the comment period. Parties were free to comment on the document once it became available in the record. As noted above, in the final EIS Commission staff considered late-filed comments on the draft EIS, to the extent practicable, and we are considering comments filed on the final EIS in this order to the extent practicable. While WELC points out what it alleges is a procedural error, it does

mitigation,[277] and forthcoming authorizations from other agencies.[278] Some commenters argue that a corrected or supplemental draft EIS should have been issued for comment.[279]

160. The draft EIS is a draft of the agency's proposed final EIS and, as such, its purpose is to elicit suggestions for change. 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.[280] NEPA does not require a complete mitigation plan be actually formulated at the onset, but only that the proper procedures be followed for ensuring that the environmental consequences have been fairly evaluated.[281] In addition, NEPA does not require every study or aspect of an analysis to be completed before an agency can issue a final EIS, and the courts have held that agencies do not need perfect information before it takes any action.[282]

161. The final EIS identified baseline conditions for all relevant resources. Final mitigation plans will not present new environmentally significant information nor pose

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not demonstrate how the complained of action in any way precluded it from commenting in full on the issues in this proceeding.

[277] *See, e.g.*, WELC's July 3, 2019 Comments at 14-15; Snattlerake's July 5, 2019 Comments at 18-19.

[278] *See, e.g.*, Natural Resources Defense Council's July 5, 2019 Motion to Intervene and Comments at 45 (NRDC's July 5, 2019 Comments).

[279] *See, e.g.*, April 19, 2019 Landowner Motion at 15-16; WELC July 3, 2019 Comments at 299.

[280] 40 C.F.R. § 1502.9(a) (2019); *see also Nat'l Comm. for the New River, Inc. v. FERC*, 373 F.3d 1323, 1328 (D.C. Cir. 2004) (*Nat'l Comm. for the New River*) (holding that FERC's draft EIS was adequate even though it did not have a site-specific crossing plan for a major waterway where the proposed crossing method was identified and thus provided "a springboard for public comment") (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (*Methow Valley Citizens Council*)).

[281] *See Methow Valley Citizens Council*, 490 U.S. at 352-53.

[282] *U.S. Dep't of the Interior v. FERC*, 952 F.2d 538, 546 (D.C. Cir. 1992); *State of Alaska v. Andrus*, 580 F.2d 465, 473 (D.C. Cir. 1978), *vacated in part sub nom. W. Oil & Gas Ass'n v. Alaska*, 439 U.S. 922 (1978) ("NEPA cannot be 'read as a requirement that [c]omplete information concerning the environmental impact of a project must be obtained before action may be taken."') (quoting *Jicarilla Apache Tribe of Indians v. Morton*, 471 F.2d 1275, 1280 (9th Cir. 1973)).

substantial changes to the proposed action that would otherwise require a supplemental EIS. As we have explained in other cases, 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.[283] Perhaps more important, their development is subject to many variables whose outcomes cannot be predetermined. Accordingly, post-certification studies may properly be used to develop site-specific mitigation measures.[284]

162. As discussed further below, the final EIS recommends, and we require in this order, that the applicants not commence construction of the projects until they provide certain outstanding information[285] and confirm they have received all applicable authorizations required under federal law.[286]

163. We also disagree that there was a need to issue a revised draft EIS. CEQ regulations require agencies to prepare supplements to either draft or final EISs if: (i) the agency makes substantial changes to the proposed action that are relevant to environmental concerns; or (ii) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact.[287] Here, the final EIS, which incorporates comments filed on the draft EIS, contains ample information for the Commission to fully consider and address the environmental impacts associated with the Jordan Cove LNG Terminal and Pacific Connector Pipeline. The additional material in the final EIS relates to issues discussed in

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[283] *See, e.g.*, *Algonquin Gas Transmission, LLC*, 154 FERC ¶ 61,048, at P 94 (2016)*; East Tennessee Natural Gas Co.*, 102 FERC ¶ 61,225, at P 23 (2003), *aff'd sub nom. Nat'l Comm. for the New River*, 373 F.3d 1323.

[284] In some instances, the certificate holder may need to access property in order to obtain the necessary information. *Midwestern Gas Transmission Co.*, 116 FERC ¶ 61,182, at P 92 (2006).

[285] For example, Environmental Condition 17 requires Pacific Connector to file an updated landslide identification study prior to beginning construction of the Pacific Connector Pipeline. The study must identify specific mitigation that will be implemented for any previously unidentified moderate or high-risk landslide areas of concern, as well as the final monitoring protocols and/or mitigation measures for all landslide areas that were not accessible during previous studies.

[286] *See* Environmental Condition 11.

[287] 40 C.F.R. § 1502.9(c) (2019).

the draft EIS and does not result in any significant modification of the projects that would require additional public notice or issuance of a revised draft EIS for further comment.

164. Based on the above, we find that the Commission has provided the public a meaningful opportunity to participate in the NEPA process (as well as our larger application review process) and doing so has resulted in an informed Commission decision. Accordingly, we deny the motion seeking an order requiring correction of the draft EIS, the dissemination of paper copies, and an extension of comment period filed jointly by several landowner-intervenors on April 19, 2019.[288]

### 2. Arguments Regarding the Scope of Analysis in the EIS

#### a. Programmatic EIS

165. Several commenters argue that the Commission must prepare a programmatic EIS for all LNG export proposals "already approved, in line for approval or in the planning stages to be approved."[289] CEQ's regulations implementing NEPA do not require broad or "programmatic" NEPA reviews. In guidance, CEQ has stated that such a review may be appropriate where an agency is: (1) adopting official policy; (2) adopting a formal plan; (3) adopting an agency program; or (4) proceeding with multiple projects that are temporally or spatially connected.[290]

166. As the Commission has previously explained, there is no Commission program, plan, or policy with respect to export of natural gas (a matter within DOE's ambit) or the development of LNG terminals.[291] The mere fact that there are a number of approved, proposed, or planned LNG export projects does not evidence the existence of a regional plan or policy of the Commission. Instead, this information confirms that such development is initiated solely by a number of different companies in private industry.

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[288] *See supra* note 190.

[289] *See, e.g.*, Ronald Crete's July 1, 2019 Comments at 3; *see also* Citizens Against LNG Inc. and Jody McCaffree's (jointly filed) November 13, 2017 Comments at 1.

[290] Memorandum from CEQ to Heads of Federal Departments and Agencies, *Effective Use of Programmatic NEPA Reviews* 13-15 (Dec. 24, 2014), https://ceq.doe.gov/docs/ceq-regulations-and-guidance/Effective_Use_of_Programmatic_NEPA_Reviews_Final_Dec2014_searchable.pdf.

[291] *See Magnolia LNG, LLC*, 157 FERC ¶ 61,149, at P 17 (2016) (citing *Corpus Christi Liquefaction, LLC*, 151 FERC ¶ 61,098, at PP 24-31 (2015); *Cameron LNG, LLC*, 147 FERC ¶ 61,230, at PP 70-72 (2014)).

As the Supreme Court held in in *Kleppe v. Sierra Club*,[292] a programmatic EIS is not required to evaluate the regional development of a resource by private industry if the development is not part of, or responsive to, a federal plan or program in that region.[293]

167. While the Commission's practice is to consider each LNG export project application on its own merits, we may, however, choose to prepare a multi-project environmental document regarding projects that are closely related in time or geography, where that is the most efficient way to review project proposals,[294] and the Commission's NEPA documents do consider the cumulative impacts of other projects in the same geographic and temporal scope as the proposal under consideration. Here are no proposed LNG export terminal proposals in the same geographic area and temporal scope as the Jordan Cove LNG Terminal, so that preparing a programmatic EIS would not assist in our decision making. Thus, we find a programmatic EIS is neither required nor useful under the circumstances here.

### b. Lifecyle Evaluation of Impacts

168. A number of commenters assert that the Commission must provide a lifecycle evaluation of environmental impacts, namely emissions, associated with the projects.[295] Although the Commission did provide direct emissions estimates associated with construction and operation of the Jordan Cove LNG Terminal and Pacific Connector Pipeline,[296] commenters ague the Commission must also analyze indirect impacts associated with upstream production and downstream end use.[297]

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[292] 427 U.S. 390 (1976).

[293] *Id.* at 401-02.

[294] *See* 40 C.F.R. § 1508.25 (2019); *see also, e.g.*, EA for the Monroe to Cornwell Project and the Utica Access Project, Docket Nos. CP15-7-000 & CP15-87-000 (filed Aug. 19, 2015); Final Multi-Project Environmental Impact Statement for Hydropower Licenses: Susquehanna River Hydroelectric Projects, Project Nos. 1888-030, 2355-018, and 405-106 (filed Mar. 11, 2015).

[295] *See, e.g.*, NRDC's July 5, 2019 Comments at 61-70.

[296] *See infra* P 259.

[297] *See, e.g.*, NRDC's July 5, 2019 Comments at 61-70.

169. Indirect effects are defined as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable."[298] Accordingly, to determine whether an impact should be studied as an indirect impact, the Commission must determine whether it is: (1) caused by the proposed action; and (2) reasonably foreseeable.[299]

170. Courts have found that an impact is reasonably foreseeable if it is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision."[300] Although NEPA requires "reasonable forecasting,"[301] an agency "is not required to engage in speculative analysis"[302] or "to do the impractical, if not enough information is available to permit meaningful consideration."[303]

171. In *Freeport*,[304] the D.C. Circuit examined the Commission's responsibility to study indirect effects relating to the export of natural gas when exercising its NGA section 3 responsibilities. The court explained that NEPA requires a reasonably close causal relationship between a project and its potential effects and thus the Commission need not "examine everything for which the Projects could conceivably be a but-for cause."[305] The court further found that the "Commission's NEPA analysis did not have to address the indirect effects of the anticipated export of natural gas" "because the Department of Energy, not the Commission has sole authority to license the export of any natural gas going through the Freeport facilities."[306] The court explained that "[i]n the

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[298] 40 C.F.R. § 1508.8(b) (2019).

[299] *See id*.; *see also id*. § 1508.25(c).

[300] *EarthReports, Inc. v. FERC*, 828 F.3d at 955 (citations omitted); *see also Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992).

[301] *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1079 (9th Cir. 2011) (quoting *Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944, 962 (9th Cir. 2003)).

[302] *Id.* at 1078.

[303] *Id.* (quoting *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1014 (9th Cir. 2006) (internal quotation marks and citation omitted)).

[304] *Freeport*, 827 F.3d 36.

[305] *Id.* at 46.

[306] *Id.* at 47.

specific circumstances where, as here, an agency 'has no ability to prevent a certain effect due to' that agency's 'limited statutory authority over the relevant action[],' then that action 'cannot be considered a legally relevant cause of the effect' for NEPA purposes."[307]

172. Commenters assert, however, that the *Freeport* decision was specific to the Commission's authority under section 3 of the NGA and that the Commission's NGA section 7 authority over pipelines is broader.[308] Specifically, the Western Environmental Law Center (WELC) notes that the D.C. Circuit in *Sabal Trail*[309] differentiated the Commission's authority to consider indirect effects when evaluating NGA section 3 applications and NGA Section 7 applications.[310] Accordingly, commenters assert that *Freeport* does not limit the scope of the Commission's review of the Pacific Connector Pipeline.[311]

173. In particular, commenters argue that the Commission can reasonably foresee the amount and location of additional gas production that the Pacific Connector Pipeline Project may cause.[312] Natural Resources Defense Council (NRDC) argues that the Commission could estimate the number of wells and production methods used based on average production rates and methods, which can be obtained from state databases.[313] Similarly, WELC contends that there are readily available data and tools to estimate the

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[307] *Id.* (quoting *Dep't of Transp. v. Public Citizen*, 541 U.S. 752, 770 (2004)). *See also Sabine Pass Liquefaction, LLC*, 146 FERC ¶ 61,117, *reh'g denied*, 148 FERC ¶ 61,200 (2014), *aff'd sub nom. Sierra Club v. FERC*, 827 F.3d 59 (D.C. Cir. 2016); *Dominion Cove Point LNG, LP*, 148 FERC ¶ 61,244 (2014), *reh'g denied*, 151 FERC ¶ 61,095 (2015), *aff'd sub nom. EarthReports, Inc. v. FERC*, 828 F.3d 949 (D.C. Cir. 2016). *See generally Adelphia Gateway, LLC*, 169 FERC ¶ 61,220 (2020) (McNamee, Comm'r, concurrence) (elaborating on the purpose of the NGA).

[308] *See, e.g.*, WELC's July 3, 2019 Comments at 274 (citing *Sabal Trail*, 867 F.3d at 1372-73).

[309] 867 F.3d 1357.

[310] WELC's July 3, 2019 Comments at 274.

[311] *Id.*

[312] *See, e.g.*, WELC's July 3, 2019 Comments at 277.

[313] NRDC's July 5, 2019 Comments at 63.

amount and regions of additional gas production.[314] NRDC and WELC also state that, to the extent information about upstream production is unknown, the Commission should further develop the record.

174. Here, the specific source of natural gas to be transported via the Pacific Connector Pipeline has not been identified with any precision and will likely change throughout the project's operation, as the pipeline will receive gas from other interstate pipelines. As we have previously concluded in other natural gas infrastructure proceedings and affirm with respect to Pacific Connector Pipeline, the environmental effects resulting from natural gas production are generally neither caused by a proposed pipeline project nor are they reasonably foreseeable consequences of our approval of an infrastructure project, as contemplated by CEQ's regulations, where the supply source is unknown.[315] NRDC and WELC provide only general information and ask the Commission to extrapolate the data to determine specific project effects. However, there is no evidence that the information cited would help predict the number and location of any additional wells that would be drilled as a result of any increased production demand associated with the project.[316] Moreover, there is no evidence demonstrating that, absent approval of the project, this gas would not be brought to market by other means. Therefore, we conclude that the environmental impacts of upstream natural gas production are not an indirect effect of the project.[317]

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[314] WELC's July 3, 2019 Comments at 277-78 (citing ICF International, *U.S. LNG Exports: Impacts on Energy Markets and the Economy* (Mar. 2013, Nov. 2013, Sept. 2017); Deloitte MarketPoint, *Analysis of the Economic Impact of LNG Exports from the United States* (Oct. 2012); EIA, *Effect of Increased Levels of Liquefied Natural Gas Exports on U.S. Energy Markets* (Oct. 2014); EIA, *Annual Energy Outlook* (2018, 2019); EIA, *Oil and Gas Supply Module of the National Energy Modeling System* (2018)).

[315] *See, e.g., Cent. N.Y. Oil & Gas Co., LLC*, 137 FERC ¶ 61,121, at PP 81-101 (2011), *order on reh'g*, 138 FERC ¶ 61,104, at PP 33-49 (2012), *petition for review dismissed sub nom. Coal. for Responsible Growth and Res. Conservation v. FERC*, 485 F.App'x. 472, 474-75 (2d Cir. 2012) (unpublished opinion).

[316] *See Sierra Club v. U.S. Dep't of Energy*, 867 F.3d at 200 (accepting DOE's "reasoned explanation" as to why the indirect effects pertaining to induced natural gas production were not reasonably foreseeable where DOE noted the difficulty of predicting both the incremental quantity of natural gas that might be produced and where at the local level such production might occur, and that an economic model estimating localized impacts would be far too speculative to be useful).

[317] *Birckhead v. FERC*, 925 F.3d 510, 517-18 (D.C. Cir. 2019) (holding the Commission did not violate NEPA in not considering upstream impacts where there was

175. With respect to indirect impacts associated with downstream end use, in *Sabal Trail*, the D.C. Circuit held that where it is known that the natural gas transported by a project will be used for a specific end-use combustion, the Commission should "estimate[] the amount of power-plant carbon emissions that the pipelines will make possible."[318] However, outside the context of known specific end use, the D.C. Circuit affirmed in *Birckhead v. FERC*, the fact that "emissions from downstream gas combustion are [not], as a categorical matter, always a reasonably foreseeable indirect effect of a pipeline project."[319]

176. In this case, Pacific Connector has executed two precedent agreements with Jordan Cove for 95.8 percent of the firm capacity available on the pipeline. Jordan Cove will use some of the natural gas at the terminal site to power steam turbine generators: emissions associated with that use are included in the emissions estimate Commission staff provided regarding operation of the Jordan Cove LNG Terminal.[320] However, the majority of the gas delivered to the Jordan Cove LNG Terminal will be liquefied for export. The end-use of the liquefied gas is unknown, and the Commission does not have authority over, and need not address the effects of, the anticipated export of the gas.[321]

### c. DOE's Authorization as a "Connected Action"

177. Some commenters allege that even if the Commission's authorizations are not the legally relevant cause of upstream and downstream impacts, these impacts still must be evaluated as part of DOE's approval, which they claim is a "connected action." Arguing that the issue was left unanswered by the court in *Freeport*, WELC contends that the Commission's approval of the siting, construction, and operation of the Jordan Cove LNG Terminal and DOE's authorization of LNG exports from the project are "connected

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no evidence to predict the number and location of additional wells that would be drilled as a result of a project).

[318] *Sabal Trail*, 867 F.3d at 1371.

[319] *Birckhead v. FERC*, 925 F.3d at 519 (citing *Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n*, 449 F.2d 1109, 1122 (D.C. Cir. 1971)). The court in *Birckhead* also noted that "NEPA . . . requires the Commission to at least attempt to obtain the information necessary to fulfill its statutory responsibilities," but citing to *Delaware Riverkeeper Network*, the court acknowledged that NEPA does not "demand forecasting that is not meaningfully possible." *Birckhead v. FERC*, 925 at 520 (quoting *Delaware Riverkeeper Network v. FERC*, 753 F.3d 1304, 1310 (D.C. Cir. 2014)).

[320] *See infra* P 259.

[321] *Freeport*, 827 F.3d at 47.

actions," the impacts of which must be fully analyzed in the Commission's EIS.[322] Specifically, WELC asserts that the Commission, as the lead agency responsible for reviewing the environmental effects of the applicants' proposals under NEPA, must ensure that the review consists of impacts of all related approvals, including the indirect effects of both the construction and operation of the Jordan Cove LNG Terminal facilities as well as the export of LNG from those facilities.[323] WELC claims that the projects will increase gas production, increase domestic use of coal, and increase use of natural gas overseas, all of which are foreseeable effects of the Commission's and DOE's authorizations and should be analyzed in the EIS.[324]

178. WELC distorts the concept of "connected actions." The requirement that an agency consider connected actions in a single environmental document is to "prevent agencies from dividing one project into multiple individual actions" with less significant environmental effects[325] and "to prevent the government from 'segmenting' its *own* 'federal actions into separate projects and thereby failing to address the true scope and impact of the activities that should be under consideration.'"[326]

179. Here, the proposals before the Commission are requests to site, construct, and operate the Jordan Cove LNG Terminal and the Pacific Connector Pipeline. These projects were considered together in a single environmental analysis. The export of natural gas from the Jordan Cove LNG Terminal, by contrast, was not a proposal before the Commission because, as the *Freeport* court noted, "[DOE], not the Commission, has

[322] WELC's July 3, 2019 Comments at 275-76.

[323] *Id.* at 276.

[324] *Id.* at 276-81.

[325] *Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d at 1326 (approving the Commission's determination that, although a Dominion-owned pipeline project's excess capacity may be used to move gas to the Cove Point terminal for export, the projects are "unrelated" for NEPA purposes); *see also City of W. Chicago, Ill. v. U.S. Nuclear Regulatory Comm'n*, 701 F.2d 632, 650 (7th Cir. 1983) (citing *City of Rochester v. U.S. Postal Serv.*, 541 F.2d 967, 972 (2d Cir. 1976)).

[326] *Sierra Club v. U.S. Army Corps of Eng'rs*, 803 F.3d 31, 49-50 (D.C. Cir. 2015) (emphasis added) (quoting *Delaware Riverkeeper Network v. FERC*, 753 F.3d at 1313).

sole authority to license the export of any natural gas going through the [Jordan Cove LNG] facilities."[327]

180. Further, in arguing that DOE's export authorizations are connected actions because the Energy Policy Act of 2005 calls for the Commission to serve as "lead agency" for a coordinated NEPA review, WELC erroneously conflates the CEQ regulations on "connected actions"[328] and "lead agencies."[329] In the Energy Policy Act of 2005, Congress designated the Commission as "the lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act" for LNG-related authorizations required under section 3 of the NGA.[330] While the lead agency supervises the preparation of the environmental document where more than one federal agency is involved, the "lead agency" designation does not alter the scope of the project before the Commission either for approval or environmental review.[331] Nor does the lead agency role make the Commission responsible for ensuring a cooperating federal agency's compliance with its own NEPA responsibilities.[332] Thus, the Commission did not impermissibly segment its environmental review.

181. In any event, WELC's argument ignores the fact that DOE has authorized Jordan Cove to export up to 395 Bcf per year of natural gas to FTA countries.[333] This volume is equivalent to Jordan Cove LNG Terminal's nameplate capacity of 7.8 MTPA of LNG. Accordingly, the criteria for determining whether the Commission's proceeding is a connected action with the DOE's pending proceeding for additional export authorization

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[327] *See Freeport*, 827 F.3d at 47.

[328] 40 C.F.R. § 1508.25(a)(1).

[329] *Id*. § 1501.5.

[330] *See* 15 U.S.C. § 717n(b)(1); *see also Columbia Riverkeeper v. U.S. Coast Guard*, 761 F.3d 1084, 1087-88 (9th Cir. 2014) (discussing FERC's role as lead agency under the Energy Policy Act of 2005).

[331] *See* 40 C.F.R. § 1501.5(a) (detailing a lead agency's role).

[332] *See* 40 C.F.R. § 1503.3 (cooperating agency required to specify what additional information it needs to fulfill its own environmental review); *see also* 40 C.F.R. § 1506.3 (allowing a cooperating agency to adopt the lead agency's environmental document to fulfill its own NEPA responsibilities if independently satisfied that the environmental document adheres to the cooperating agency's comments and recommendations).

[333] *See supra* note 20.

to non-FTA countries cannot be met.[334] Specifically, the liquefaction project can proceed without obtaining from DOE export authorization to non-FTA countries and so does not depend on obtaining the authorization.[335]

### d. Methodology for Assessing Climate Change

182. Some commenters assert that the Commission's NEPA analysis is flawed because the EIS does not use the Social Cost of Carbon, or a similar tool (e.g., the Social Cost of Methane or the Social Cost of Nitrous Oxide), to evaluate climate change impacts.[336] NRDC, WELC, and others assert that the Commission erroneously claims there is no reliable method for evaluating climate impacts.[337] They further argue that the Commission's failure to use the Social Cost of Carbon or a similar methodology renders NEPA's "hard look" requirement unmet.[338]

183. The Social Cost of Carbon has been described as an estimate of the monetized climate change damage associated with an incremental increase in $CO_2$ emissions in a given year.[339] 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 the Commission's decisions on natural gas infrastructure projects under the NGA.[340] We adopt that reasoning here. Moreover, the Commission has explained it does

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[334] *See* 40 C.F.R. § 1508.25(a)(1)(i)-(iii) (defining "connected actions").

[335] *Id.*

[336] *See, e.g.*, NRDC's July 5, 2019 Comments at 70-83; WELC's July 3, 2019 Comments at 267-272; Environmental Defense Fund, Institute for Policy Integrity at New York University School of Law, Montana Environmental Information Center, WELC, and Union of Concerned Scientists' (jointly filed) July 8, 2019 Comments.

[337] NRDC's July 5, 2019 Comments at 70-83; WELC's July 3, 2019 Comments at 268.

[338] *See, e.g.*, NRDC's July 5, 2019 Comments at 73-74.

[339] Interagency Working Group on the Social Cost of Greenhouse Gases, *Technical Support Document – Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866* at 3 (Aug. 2016), https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf

[340] *Mountain Valley*, 161 FERC ¶ 61,043, at P 296, *order on reh'g*, 163 FERC ¶ 61,197, at PP 275-297 (2018), *aff'd, Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at *2 (unpublished) ("[The Commission] gave several reasons why it believed petitioners' preferred metric, the Social Cost of Carbon tool, is not an

not use monetized cost-benefit analyses as part of its NEPA review.[341] As discussed further below, there is no universally accepted methodology for evaluating the projects' impacts on climate change.[342]

### e. Project Purpose and Need, and Range of Alternatives

184. Several commenters contend that the EIS defined the purpose and need of the projects too narrowly, which led to an insufficient analysis of the alternatives to the projects.[343] An agency's environmental document must include a brief statement of the purpose and need to which the proposed action is responding.[344] An agency uses the purpose and need statement to define the objectives of a proposed action and then to identify and consider legitimate alternatives.[345] CEQ has explained that "[r]easonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."[346]

185. Courts have upheld federal agencies' use of applicants' project purpose and need as the basis for evaluating alternatives.[347] When an agency is asked to consider a specific plan, the needs and goals of the parties involved in the application should be taken into

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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.").

[341] *See Florida Southeast Connection, LLC*, 162 FERC ¶ 61,233, at PP 39-44 (2018).

[342] *See infra* P 261; *see also* final EIS at 4-850.

[343] *See, e.g.*, WELC's July 3, 2019 Comments at 282-83; the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians' July 8, 2019 Comments at 9-10; NRDC's July 5, 2019 Comments at 27.

[344] *See* 40 C.F.R. § 1508.9 (2019) (for an Environmental Assessment); 40 C.F.R. § 1502.13 (2019) (for an EIS).

[345] *See Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1175 (10th Cir. 1999).

[346] *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18,026-27 (Mar. 23, 1981).

[347] *E.g., City of Grapevine v. U.S. Dep't of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994).

account.[348] We recognize that a project's purpose and need should not be so narrowly defined as to preclude consideration of what may actually be reasonable alternatives.[349] Nonetheless, an agency need only consider alternatives that will bring about the ends of the proposed action, and the evaluation is "shaped by the application at issue and by the function that the agency plays in the decisional process."[350]

186. For the Jordan Cove LNG Terminal and Pacific Connector Pipeline, the EIS appropriately relied on the applicants' stated purpose and need. We find that doing so did not preordain that the projects as originally proposed were the only way to satisfy the specified purpose and need.[351] In fact, Commission staff identified numerous reasonable alternatives to the projects, which were evaluated in the EIS.[352] As discussed further below, staff found that, with the exception of one pipeline variation, the alternatives analyzed would either not meet the projects' purpose and need, would not be technically feasible, or would not offer a significant environmental advantage.[353]

187. We also reject NRDC's argument that the EIS "fail[ed] to include a true 'no-action' alternative."[354] NRDC claims that there is "no practical difference between the No Action Alternative and the Proposed Action" because the EIS notes that under the no-action alternative, other LNG export projects could be proposed to meet the demand the applicants intend to serve.[355] However, the EIS clearly states that under the no-action

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

[349] *Id.* at 196.

[350] *Id.* at 199; *see also Sierra Club v. U.S. Forest Serv.*, 897 F.3d 582 (4th Cir. 2018) (finding the statement of purpose and need for a Commission-jurisdictional natural gas pipeline project that explained where the gas must come from, where it will go, and how much the project would deliver, allowed for a sufficiently wide range of alternatives but was narrow enough that there were not an infinite number of alternatives).

[351] The Niskanen Center claims that "FERC has made the DEIS alternatives analysis artificially narrow in order to arrive at a preordained conclusion." Niskanen Center's July 5, 2019 Comments at 42.

[352] *See* final EIS at 3-1 to 3-52.

[353] *See infra* PP 269-272.

[354] NRDC's July 5, 2019 Comments at 32.

[355] *Id.* at 33.

alternative "the proposed action would not occur . . . and as a result, the environment would not be affected."[356] Moreover, the resource-by-resource discussion in section 4 of the final EIS first details the existing state of each resource and then describes the environmental impacts of the preferred alternative.[357] Section 5 of the final EIS summarizes staff's conclusions about those impacts.[358] By providing a description of the existing state of each resource and a description of the environmental impacts of the preferred alternative, the EIS provides the Commission with a meaningful comparison of the harm to be avoided under a no-action alternative.

188. Some commenters state that the EIS failed to evaluate the public benefit or market need for the projects. These commenters conflate the balancing of economic benefits (market need) and effects under the Certificate Policy Statement with the description of the purpose and need in the EIS.[359] The purpose and need statement in the final EIS complied with CEQ's regulations, which provide that this statement "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed actions" for purposes of its environmental analysis.[360] The public interest determinations for the projects and the determination of the need for the pipeline lie with the Commission. Neither NEPA nor the NGA requires the Commission to make its determination of whether a project is required by the public convenience and necessity before its final order. The final EIS appropriately stated that the determination of whether the Pacific Connector Pipeline satisfied a showing of market need according to the Certificate Policy Statement was beyond the scope of the environmental document.[361]

### f. Blanket Certificates

189. One commenter suggests that the Commission violated NEPA by not evaluating the environmental impacts associated with Pacific Connector's requested blanket

[356] Draft EIS at 3-4; final EIS at 3-4.

[357] Final EIS at 4-1 to 4-852.

[358] *Id.* at 5-1 to 5-12.

[359] *See, e.g.*, Niskanen Center's July 5, 2019 Comments at 37-41; Snattlerake's July 5, 2019 Comments at 21-24.

[360] 40 C.F.R. § 1502.13.

[361] *See* draft EIS at 1-18; final EIS at 1-7, 1-19, and R-331 (Appendix R).

certificates.[362] As explained above, a Part 157 blanket certificate gives an interstate pipeline NGA section 7 authority to automatically, or after prior notice, perform a restricted number of routine activities related to the construction, acquisition, abandonment, replacement, and operation of existing pipeline facilities provided the activities comply with constraints on costs and environmental impacts.[363] The blanket certificate authorization was created because the Commission found that a limited set of activities did not require case-specific scrutiny as they would not result in a significant impacts on rates, services, safety, security, competing natural gas companies or their customers, or on the environment.[364]

190. Given that Pacific Connector has not proposed to conduct any activity under a Part 157 blanket certificate, it would be premature for Commission staff to assess the environmental impacts of, or require mitigation for, such potential activities. Commission staff has no information regarding the location, scope, or timing of any potential activity on which to base its environmental review. In the event that Pacific Connector proposes to conduct an activity under its blanket certificate that causes ground disturbance or changes to operational air or noise emissions, Pacific Connector must notify landowners and adhere to the guidance set forth in section 380.15(a) and (b) of the Commission's regulations.[365] The blanket certificate regulations require prior notice in recognition that the projects requiring such notice may raise issues of concern for a pipeline company's existing shippers regarding possible effects on their services or may present valid environmental concerns to individual landowners, or others,

[362] Francis Eatherington's July 5, 2019 Comments at 3.

[363] *Supra* P 103.

[364] *Revisions to the Blanket Certificate Regulations and Clarification Regarding Rates*, 117 FERC ¶ 61,074, at P 7 (explaining that "[t]he blanket certificate program was designed to provide an administratively efficient means to authorize a generic class of routine activities, without subjecting each minor project to a full, case-specific NGA section 7 certificate proceeding.").

[365] Section 380.15(a) of the Commission's regulations states that siting, construction, and maintenance of facilities shall be undertaken in a way that avoids or minimizes effects on scenic, historic, wildlife, and recreational values; and section 380.15(b) requires a pipeline to take into account the desires of landowners in the planning, location, clearing, and maintenance of rights-of-way and the construction of facilities on their property. 18 C.F.R. § 380.15(a)-(b) (2019).

notwithstanding that the pipeline companies will be able to satisfy all of the blanket certificate regulations' standard conditions.[366]

### 3. Commission's Practice of Issuing Conditional Certificates

191. Some commenters, including the Oregon Department of Energy and the Oregon DLCD, assert that the Commission should abandon its practice of issuing conditional certificates.[367] The Oregon state agencies claim that conditional orders violate various environmental laws, including the Clean Water Act, the Coastal Zone Management Act, the Clean Air Act, and the Endangered Species Act.[368] Further, the agencies contend that issuing conditional orders precludes the Commission from considering the full extent of the benefits and adverse impacts of a project before making a decision.[369] Other commenters allege that the practice violates NEPA.[370]

192. The Commission's practice of issuing conditional certificates has consistently been affirmed by courts as lawful.[371] The Commission's approach is a practical response

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[366] *Equitrans LP*, 158 FERC ¶ 61,103, at P 11 (2017).

[367] As discussed above, *supra* PP 98-101, we find that the Commission's practice of using conditional certificates does not violate the Takings Clause of the Fifth Amendment of the U.S. Constitution.

[368] Oregon Department of Energy's October 26, 2017 Motion to Intervene at 3; Oregon DLCD's October 26, 2017 Motion to Intervene at 3.

[369] Oregon Department of Energy's October 26, 2017 Motion to Intervene at 3-4; Oregon DLCD's October 26, 2017 Motion to Intervene at 3; *see also* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 2.

[370] *See, e.g.*, Scott Jerger's October 19, 2017 Comments at 2.

[371] *See Del. Riverkeeper Network v. FERC*, 857 F.3d at 399 (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 Citizens for a Rural Cmty., Inc. v. FERC*, 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); *Del. Dep't. of Nat. Res. & Envtl. 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); *Pub. Utils. Comm'n. of Cal. v. FERC*, 900 F.2d 269, 282

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.[372] Although Pacific Connector and Jordan Cove will be unable to exercise the authorizations to construct and operate the projects until they receive all necessary authorizations, the Commission takes this approach in order to make timely decisions on matters related to its NGA jurisdiction that will inform project sponsors, and other licensing agencies, as well as the public. We also find that there was a robust and well-developed record before us regarding the benefits and adverse impacts of the projects upon which to make our determinations.

## B. Major Environmental Issues Addressed in the Final EIS

### 1. Geology

193. Construction of the Jordan Cove LNG Terminal will alter the topographic features at the site through clearing, grading, excavation, dredging, and fill placement.[373] No blasting is anticipated during construction of the Jordan Cove LNG Terminal, and construction and operation are not anticipated to have effects on identified mineral resources, active mines, or oil and gas production facilities.[374]

194. The Jordan Cove LNG Terminal will be located within the Cascadia subduction zone, which is a seismically active area.[375] Because the seismic risk to the site is considered high,[376] Jordan Cove will implement several measures. Jordan Cove will monitor ground motions at the facility with three sets of seismometers; if any of the seismometers exceed safe limits, an alarm would sound in the control room where operators could shut down the project.[377] In addition, the LNG storage tanks, systems to

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(D.C. Cir. 1990) (holding the Commission had not violated NEPA by issuing a certificate conditioned upon the completion of the environmental analysis).

[372] *See, e.g.*, *Broadwater Energy LLC*, 124 FERC ¶ 61,225, at P 59 (2008); *Crown Landing LLC*, 117 FERC ¶ 61,209, at P 26 (2006); *Millennium Pipeline Co., L.P.*, 100 FERC ¶ 61,277, at PP 225-231 (2002).

[373] Final EIS at 4-5.

[374] *Id.*

[375] *Id.* at 4-44.

[376] *See id.* at 4-776 to 4-777.

[377] *Id.* at 4-776.

isolate and maintain the LNG storage tanks in a safe shutdown condition, and systems that protect the integrity of the LNG storage tanks will be designed consistent with PHMSA regulations to withstand earthquake ground motions that have a 2 percent probability of being exceeded in 50 years.[378] Additionally, because the LNG Terminal project site has a moderate to high landslide susceptibility hazard, Jordan Cove will regrade the steep dunes to reduce the potential for a landslide to occur.[379] Furthermore, Environmental Condition 38 requires that Jordan Cove employ an inspector and provide inspection reports to be filed with the Commission, to ensure that the construction of the terminal conforms to the applicable design drawings and specifications developed for the facilities that are designed to meet these design requirements. [380]

195. Jordan Cove also conducted hydrodynamic and tsunami modeling studies and designed the LNG Terminal to be consistent with maximum tsunami run-up elevations.[381] The tsunami protection berms, safety critical elements of the facility, point of support elevations, invert levels, and underside of essential equipment would be at least one foot above the estimated maximum run-up elevation and most will be far above that elevation.[382] The final EIS concludes that the tsunami elevations used by Jordan Cove are suitable for the site,[383] and also that, consistent with international standards, the LNG Terminal would be able to withstand, without damage, tsunami inundation stemming from an event that has a 2 percent probability of being exceeded in 50 years.[384]

196. Much of the Pacific Connector Pipeline will be located in the Cascadia subduction zone. In addition, the pipeline route will cross steep slopes and mountain ranges which

[378] *Id.* at 4-776 to 4-777.

[379] *Id.* at 4-784.

[380] *Id.* at 4-777 to 4-778 and 4-795. Environmental Condition 38 was changed slightly from the recommendation in the final EIS to clarify that the condition is specific to construction of the Jordan Cove LNG Terminal.

[381] *Id.* at 5-1 and 4-779.

[382] *Id.* at 4-779 to 4-780.

[383] *Id.* at 4-780.

[384] *Id.* at 4-775 to 4-780. Oregon DLCD raises concerns regarding potential impacts on the LNG terminal resulting from an earthquake or tsunami. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 30.

increases the potential for erosion, landslides, and slope failures.[385] Pacific Connector designed the route, with input from stakeholders, to avoid areas with high geologic risk.[386] Pacific Connector will implement site-specific construction techniques and best management practices to address local geological hazards that could not be avoided.[387] The final EIS concludes, based on a review of potential impacts, historical data, seismic hazard mapping, peak horizontal ground acceleration values, pipeline tolerances, and Pacific Connector's proposed impact avoidance and minimization measures, that construction and operation of the pipeline would not be significantly affected by geological hazards.[388] However, to ensure the risk of landslides in five moderate risk areas is further reduced, the final EIS recommends, and we require in Environmental Condition 17, that, prior to construction, Pacific Connector file final monitoring protocols and mitigation measures and conduct an additional review of the most recent light detection and ranging data available from the Oregon Department of Geology and Mineral Industries.[389]

197. Untapped mineral resources are present along the pipeline route and the potential for future mining and mine claims is possible; however, the final EIS concludes that the Pacific Connector Pipeline would not significantly affect future mining development.[390]

198. Overall, based on Jordan Cove and Pacific Connector's proposed construction and operation procedures, methods, and plans to appropriately design for geological hazards, as well as the implementation of minimization and mitigation measures, the final EIS concludes that the projects would not significantly affect geology and would not be significantly affected by geological hazards.[391]

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[385] Final EIS at 5-1.

[386] *Id.* at 4-6.

[387] *Id.* at 4-6.

[388] *Id.* at 5-1.

[389] *Id.* at 4-25.

[390] *Id.* at 4-44.

[391] *Id.*

### 2. Soils

199. Construction and operation of the Jordan Cove LNG Terminal will permanently impact underlying soils,[392] although much of the project area has been previously modified by industrial activities and the placement of dredged materials.[393] To reduce impacts on soils, Jordan Cove will implement best management practices, as well as its project-specific *Erosion and Sediment Control Plan*, the applicants' *Upland Erosion Control, Revegetation, and Maintenance Plan* (Plan), and the applicants' *Wetland and Waterbody Construction and Mitigation Procedures* (Procedures).[394]

200. Low levels of soil, sediment, and groundwater contaminants have been identified at the terminal site.[395] The final EIS finds that implementation of erosion controls for runoff during construction and operation, as well as revegetation plans would prevent low-level contamination from entering surface waters.[396] Jordan Cove continues to work with the Oregon Department of Environmental Quality (Oregon DEQ) toward the determination of appropriate regulatory requirements for the handling of contaminated soil and sediment.[397] Once project design is finalized and prior to beginning construction, Jordan Cove will submit a disposal plan for contaminated soils to Oregon DEQ.[398] With implementation of Oregon DEQ's requirements and Jordan Cove's *Spill Prevention, Containment, and Countermeasures Plan*, the final EIS concludes that the

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[392] *Id.* at 5-2.

[393] *Id.* at 4-47.

[394] The applicants' Plan and Procedures are based on the 2013 FERC Plan and Procedures, which are a set of baseline construction and mitigation measures developed to minimize the potential environmental impacts of construction on upland areas, wetlands and waterbodies. *See* Federal Energy Regulatory Commission, *Environmental Guidelines* (May 2013), https://www.ferc.gov/industries/gas/enviro/guidelines.asp.

[395] Final EIS at 4-49 to 4-54.

[396] *Id.* at 4-51. The final EIS addresses this issue by citing Oregon DEQ's "No Further Action" determination, which states "[w]hile surface soils at the LNG terminal site meet human health and ecological screening criteria, they contain low levels of potentially bio-accumulating chemicals and must not be placed in waters of the state," and noting that Jordan Cove is working with Oregon DEQ on developing a disposal mitigation plan. *Id.*

[397] *Id.* at 4-52.

[398] *Id.*

project is not expected to spread existing contamination or cause additional contamination.[399]

201. The Pacific Connector Pipeline will cross approximately 68 miles of soils classified as prime farmland or farmland of statewide importance.[400] In areas where existing agricultural land uses would be affected, Pacific Connector will implement measures to reduce impacts on prime farmland and crop yields, such as topsoil salvaging, scarification, and subsequent testing to ensure potential compaction is remediated.[401] To reduce impacts on soils, Pacific Connector will implement its project-specific *Erosion Control and Revegetation Plan* and the applicants' Plan and Procedures.

202. The final EIS concludes that, based on Jordan Cove and Pacific Connector's proposed construction and operation procedures and methods and the avoidance, minimization, and mitigation measures that would be implemented, the projects would temporarily and permanently impact soils, but the impacts would not be significant.[402]

### 3. Water Resources

203. The Jordan Cove LNG Terminal project area is underlain by the unconfined Dune-Sand Aquifer.[403] Due to the proximity to the Pacific Ocean, saltwater intrudes into the aquifer and influences groundwater quality.[404] The Coos Bay-North Bend Water Board maintains 18 non-potable, groundwater withdrawal wells north of the terminal site, the closest of which is 3,500 feet north; the final EIS concludes that construction and operation of the Jordan Cove LNG Terminal would not impact these wells due to the distance from the project.[405]

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[399] *Id.* at 4-54.

[400] *Id.* at 4-57.

[401] *Id.*

[402] *Id.* at 5-2.

[403] *Id.* at 4-76.

[404] *Id.*

[405] *Id.* at 4-76 to 4-77. There are also four groundwater wells permitted for industrial use and fire protection within or near the disturbance area. *Id.* at 4-76. Three of the four wells will be buried to create a construction staging area and would be permanently abandoned; Jordan Cove has indicated that new wells will be drilled to replace the buried wells. *Id.* at 4-77. Additionally, some domestic supply wells could be impacted by the Kentuck Slough Wetland Mitigation Project, *see infra* P 209.

204. Jordan Cove will obtain water from the Coos Bay-North Bend Water Board to construct and operate the project.[406] Project construction could result in a small, temporary drawdown effect to the overlying lakes and wetlands, estimated to no more than 6 inches and typically less.[407] Excavation and grading at the site could cause local groundwater elevations to shift, but this change would be minor and localized.[408] To minimize potential impacts on groundwater from an inadvertent release of construction equipment-related fluids, Jordan Cove will implement its *Spill Prevention, Containment, and Countermeasures Plan* and the applicants' Plan and Procedures. The final EIS concludes that impacts on groundwater resources from the Jordan Cove LNG Terminal would not be significant.[409]

205. Approximately 26 miles of the Pacific Connector Pipeline route will cross areas where groundwater can be found at or near the surface.[410] The pipeline route will cross six wellhead protection areas, and groundwater-fed springs and seeps and private wells have been identified along the pipeline route.[411] For springs, seeps, and wells located within 200 feet of construction disturbance, Pacific Connector will implement its *Groundwater Supply Monitoring and Mitigation Plan*. The final EIS concludes that based on implementation of this plan, as well as implementation of best management practices and Pacific Connector's *Spill Prevention, Containment, and Countermeasures Plan* and *Contaminated Substances Discovery Plan*, construction and operation of the project would not significantly affect groundwater resources.[412]

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Jordan Cove has initiated discussions with landowners regarding mitigation strategies to offset potential effects on these wells, including well replacement and other means of settlement. Final EIS at 4-79.

[406] Final EIS at 4-77.

[407] *Id.*

[408] *Id.* at 4-78.

[409] *Id.* at 5-2.

[410] *Id.* at 4-81.

[411] *Id.* at 4-80 to 4-81.

[412] *Id.* at 5-2.

206. Construction and operation of the Jordan Cove LNG Terminal and LNG carrier travel and water use during terminal operation will impact surface waters.[413] Based on Jordan Cove's proposed dredging and vessel operation methods and its mitigation and minimization measures, such as construction timing, treatment of decant waters prior to release, and implementation of its *Spill Prevention, Containment, and Countermeasures Plan*, the final EIS concludes the Jordan Cove LNG Terminal would not significantly affect surface waters.[414]

207. The Pacific Connector Pipeline will cross or be in close proximity to 337 waterbodies, including Coos Bay and the Coos, Umpqua, Rogue, and Klamath Rivers.[415] The pipeline will cross three rivers listed on the Nationwide Rivers Inventory, which is a listing maintained by the National Park Service of rivers with outstanding natural or cultural values judged to be at least regionally significant.[416] Pacific Connector proposes to install the pipeline across waterbodies using various crossing methods, including dry open cut, wet open cut, diverted open cut, direct pipe, bore and horizontal directional drilling (HDD).[417] Because Pacific Connector has not yet identified all drilling fluid additives that would be used with HDD crossings, the final EIS recommends, and we require in Environmental Condition 18, Pacific Connector file for Commission approval a list of the additives and other related information prior to construction. During construction, Pacific Connector will use a total of approximately 75,000 gallons of water per day for dust control, and between 31 and 65 million gallons of water for hydrostatic testing of the pipeline.[418] Water for dust control and hydrostatic

[413] *Id.* at 4-84 and 5-3.

[414] *Id.* at 4-122 and 5-3 to 5-4. Oregon DLCD states that the project-related dredging could stir up contaminants and contaminate shellfish and salmon species. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 12. The final EIS discusses potentially contaminated bay sediments that may be affected during construction of the access channel, along and adjacent to the Coos Bay Navigation Channel, and at the Kentuck Slough Wetland Mitigation Project. Final EIS at 4-54 to 4-55. We find that the final EIS's consideration of potentially contaminated bay sediments satisfy our NGA and NEPA statutory responsibilities.

[415] Final EIS at 4-95 and 5-3.

[416] *Id.* at 4-102.

[417] *Id.* at 4-96.

[418] *Id.* at 5-3.

testing will be primarily obtained from surface waters.[419] To minimize impacts associated with hydrostatic testing, Pacific Connector will implement its *Hydrostatic Test Plan*.[420]

208. With implementation of Pacific Connector's proposed waterbody crossing and restoration measures, including best management practices and measures in its *Contaminated Substances Discovery Plan* and *Drilling Fluid Contingency Plan for HDD Operations*, as well as required impact avoidance and minimization measures, including erosion controls and construction timing, the final EIS concludes the Pacific Connector Pipeline would not result in significant impacts on surface water resources.[421]

#### 4. Wetlands

209. Construction and operation of the Jordan Cove LNG Terminal will affect approximately 86 acres of wetlands, of which 22 acres would be permanently lost.[422] Construction and operation of the Pacific Connector Pipeline will temporarily affect approximately 114 acres of wetlands and will permanently impact 5 acres.[423] To address the Corps' regulations and requirements to mitigate unavoidable impacts on wetlands, the applicants each developed a *Compensatory Wetland Mitigation Plan*. According to the plans, impacts on freshwater wetland resources will be mitigated via the Kentuck Slough Wetland Mitigation Project (Kentuck project),[424] and impacts on estuarine wetland

[419] *Id.* at 4-113 to 4-116.

[420] Environmental Condition 22, discussed *infra* P 216, requires revisions to Pacific Connector's *Hydrostatic Test Plan*.

[421] *Id.* at 4-122 and 5-3 to 5-4. Oregon DLCD expresses concern regarding the upland impacts of constructing the Pacific Connector Pipeline on fish and wildlife habitat in streams. Oregon DLCD's February 20, 2020 Federal Consistency Determination at 16-17. As discussed above, the final EIS considers construction impacts to surface waters and mitigation measures to avoid and minimize surface water impacts.

[422] Final EIS at 5-4.

[423] *Id.*

[424] The Kentuck project consists of 140 acres on the eastern shore of Coos Bay at the mouth of Kentuck Slough. The property was formerly the Kentuck Golf Course but is currently owned by Jordan Cove. *Id.* at 2-18. Jordan Cove proposes to enhance and restore approximately 100 acres at the site.

resources will be mitigated via the Eelgrass Mitigation site[425] and the Kentuck project.[426] The Corps and other relevant agencies are still reviewing these plans.

210. With adherence to the applicants' project-specific Procedures and applicable permits, the final EIS concludes that the projects would not significantly affect wetlands.[427] Additionally, any permits issued by the Corps for the projects may require project-related adverse impacts on wetlands be offset by mitigation similar to that identified in the *Compensatory Wetland Mitigation Plan*.

### 5. Vegetation

211. Construction of the Jordan Cove LNG Terminal will result in the clearing of 499 acres of vegetation, of which approximately 168 acres will be permanently cleared.[428] Construction of the Pacific Connector Pipeline will result in the clearing of 4,176 acres of vegetation, of which 786 acres will be permanently affected due to maintenance of the pipeline right-of-way and aboveground facilities.[429] Except for 782 acres of late-successional and old-growth forest that will be cleared, most of the vegetation affected by the project is common and widespread in the project area.[430] The

[425] The Eelgrass Mitigation site is located near the Oregon Regional Airport in North Bend. Jordan Cove proposes to establish new eelgrass beds at the site. *Id.* Oregon DLCD expresses concern regarding impacts to eelgrass and recommends that the Commission consider alternative eelgrass mitigation sites. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 21-22, 50. Because the Corps primarily regulates the eelgrass mitigation, we recommend that Oregon DLCD raise its concerns with the Corps.

[426] Final EIS at 5-4.

[427] *Id.* at 4-139 and 5-4. Oregon DLCD expresses concern that wetland mitigation projects are not successful. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 12. Our reliance on wetland mitigation required by the Corps is reasonable. *See, e.g.*, *City of Oberlin v. FERC*, 937 F.3d 599, 610 (D.C. Cir. 2019).

[428] Final EIS at 4-156. Construction of the Kentuck project and Eelgrass Mitigation site would result in an additional 127 acres of vegetation clearing. Oregon DLCD expresses concern regarding the impact on upland vegetation and wildlife from constructing and operating the LNG terminal. As noted above, the final EIS considers these impacts.

[429] *Id.* at 4-165.

[430] *Id.* at 5-4.

loss of 782 acres of old-growth forest would represent a loss of 0.01 percent of old-growth forest in the four physiographic provinces crossed by the pipeline.[431] Forest fragmentation that will result from construction of the projects would result in new forest edges, which could lead to changes in species composition and increase the potential for the spread of exotic and invasive species.[432] Construction activities could increase the risk of wildfires, which would result in additional impacts on vegetative communities.[433] The applicants will implement numerous measures to reduce impacts on vegetation and ensure successful revegetation of disturbed areas, including measures in Pacific Connector's *Leave Tree Protection Plan*, *Integrated Pest Management Plan*, and *Fire Prevention and Suppression Plan*. The final EIS concludes that construction and operation of the projects would have permanent but not significant impacts on vegetation.[434]

### 6. Wildlife and Aquatic Resources

212. Construction of the Jordan Cove LNG Terminal will affect 577 acres of wildlife habitat, of which 186 acres will be permanently impacted.[435] Construction of the terminal will increase the rates of stress, injury, and mortality experienced by wildlife, and will result in wildlife avoidance and displacement, which could further increase rates of stress, injury, and mortality. Jordan Cove proposes to mitigate upland habitat impacts and loss at three mitigation sites: the Panhandle, Lagoon, and North Bank sites.[436] Additionally,

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[431] *Id.* at 4-171.

[432] *Id.* at 4-156 to 4-157 and 4-171.

[433] *Id.* at 4-177 to 4-178. We recognize that Oregon DLCD also raises concerns regarding wildfire risk. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 31.

[434] Final EIS at 5-4.

[435] *Id.* at Table 4.5.1.1-2.

[436] *Id.* at 4-192. The Panhandle site is 133 acres and located north of the Trans-Pacific Parkway; Jordan Cove proposes to remove Scotch broom from portions of the parcel and to provide stewardship of the entire parcel for the life of the Jordan Cove LNG Terminal. At the 320-acre Lagoon site, Jordan Cove proposes to improve the ecology of 113 acres, including burying power lines and reseeding with native vegetation, and to provide stewardship of the entire parcel for the life of the Jordan Cove LNG Terminal. The North Bank site is 156 acres and located on the north bank of the Coquille River adjacent to the Bandon Marsh National Wildlife Refuge; Jordan Cove proposes to implement forestry activities that would provide diversity at the site and promote

Jordan Cove proposes a number of other measures to reduce and mitigate impacts on wildlife including conducting pre-construction surveys for the western pond turtle, northern red-legged frog, and clouded salamander, and, if located, capturing and transporting them to a suitable habitat.[437] Lastly, to further reduce impacts on wildlife, the final EIS recommends, and we require in Environmental Condition 20, Jordan Cove file its lighting plan, prior to beginning construction, which must include measures to minimize lighting impacts on fish and wildlife.

213. Construction of the Pacific Connector Pipeline will affect 4,936 acres of wildlife habitat, of which 850 acres will be permanently impacted.[438] Constructing and operating the pipeline facilities will affect wildlife and wildlife habitat. Impacts include habitat degradation, loss, modification, and fragmentation.[439] To minimize impacts on wildlife, Pacific Connector will implement a number of measures, including measures in its *Integrated Pest Management Plan, Erosion Control and Revegetation Plan,* and *Air, Noise and Fugitive Dust Control Plan*.[440]

214. The projects are located within the migratory bird Pacific Flyway, and construction and operation of the projects could impact migratory birds.[441] The applicants propose a number of measures, included in their draft *Migratory Bird Conservation Plan*, to reduce impacts on migratory birds.[442] The applicants continue to consult with FWS to finalize the plan.

215. Coos Bay contains a variety of anadromous, marine, and estuarine fish species, and a large diverse invertebrate population.[443] Individual fish, shellfish, and other aquatic species, as well as their food sources, will be directly lost due to construction of the

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progress towards a mature forest setting, and to provide stewardship of the parcel in perpetuity. *Id.* at 4-193.

[437] *See id.* at 4-190 to 4-199.

[438] *Id.* at Tables 4.5.1.2-5 and 4.5.1.2-6.

[439] *See id.* at 4-215.

[440] *See id.* at 4-215 to 4-231.

[441] *Id.* at 4-187, 4-196, and 4-224.

[442] *See id.* at 4-196 to 4-198 and 4-224 to 4-227.

[443] *Id.* at 4-245. Shellfish (predominantly clams, crabs, and shrimp) are of significant economic importance to the Coos Bay area. *Id.*

terminal, the initial and maintenance dredging, decreased water quality, and entrainment from vessel water intake.[444] Jordan Cove will implement numerous measures to mitigate, minimize, or avoid impacts on aquatic species, including in-water work construction windows, estuarine off-site mitigation,[445] and measures in its *Dredged Material Management Plan* and *Spill Prevention, Containment, and Countermeasures Plan*.[446]

216. The Pacific Connector Pipeline will cross under 2.3 miles of estuarine habitat in Coos Bay, which provide important habitat for migratory salmon, commercial and native oyster beds, and other aquatic species, and 69 other waterbodies known or presumed to be inhabited by fish.[447] To minimize impacts on aquatic species, Pacific Connector proposes a number of measures including use of best management practices, HDD crossings, in-water work construction windows, installation of large woody debris at certain crossings, and implementation of its *Erosion Control and Revegetation Plan*.[448] Because some tribes expressed concern with Pacific Connector's proposed fish salvage plan regarding lamprey,[449] which is an important tribal resource, the final EIS recommends, and we require in Environmental Condition 21, Pacific Connector file a

[444] *Id.* at 4-316. Oregon DLCD expresses concern regarding the impacts dredging will have on habitat supporting benthic organisms. *See* Oregon DLCD's February 20, 2020 at 19-21. The final EIS considers dredging impacts on benthic organisms and finds that it is likely that rapid initial colonization of benthic organisms would occur within six months, that most typical benthos would recover within one year, and that some specific groups of benthic resources would never fully recover after initial dredging due to the 3- to 10-year maintenance dredging period. Final EIS at 4-249 to 4-255.

[445] *See supra* P 209.

[446] *See* Final EIS at 4-249 to 4-270. Oregon DLCD expresses concern regarding the introduction of non-indigenous species through ballast discharge. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 23. The final EIS discusses the regulations that LNG vessels must comply with regarding ballast discharge and finds that ballast discharge will not substantially affect water quality in Coos Bay. Final EIS at 4-91 to 4-94.

[447] Final EIS at 4-271 and 4-274.

[448] *See id.* at 4-274 to 4-311.

[449] Adult Pacific lamprey are expected to be captured during salvage, but the proposed salvage methods may not be effective for salvaging lamprey ammocete larvae. *Id.* at 4-304. Oregon DLCD also expresses concern regarding the proposed fish salvage methods. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 25.

final *Fish Salvage Plan*, prior to construction, developed in consultation with interested tribes, Oregon Department of Fish and Wildlife, FWS, and NMFS. In addition, to ensure fish and aquatic habitats are adequately protected during water withdrawals for hydrostatic testing, Environmental Condition 22 requires Pacific Connector file a revised *Hydrostatic Test Plan* that requires any water withdrawal from a flowing stream not exceed an instantaneous flow reduction of more than 10 percent of stream flow.

217. The Jordan Cove LNG Terminal and Pacific Connector Pipeline will impact designated Essential Fish Habitat (EFH).[450] Pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA), we consulted with NMFS regarding impacts on EFH. NMFS provided ten EFH conservation recommendations on January 10, 2020. In accordance with the MSA and its implementing regulations,[451] on February 3, 2020, Commission staff responded to NMFS, stating that staff recommends the Commission incorporate eight of the ten EFH conservation recommendations. Staff explained that the remaining two EFH conservation recommendations were not justified and could result in additional environmental impacts. We agree with staff's assessment.[452]

218. Based on implementation of the applicants' proposed minimization, mitigation, and avoidance measures and the characteristics of the wildlife and aquatic species in the project areas, the final EIS concludes that the projects would not significantly affect wildlife or aquatic resources.[453]

### 7. Threatened, Endangered, and Other Special Status Species

219. The final EIS identifies 36 species (or Distinct Population Segments (DPSs) or Evolutionarily Significant Units (ESUs) of species) that are federally listed as threatened or endangered (or are identified as proposed, candidates, or under review for federal listing) and may occur in or near the project areas. Critical habitat has been proposed or designated within or near the project areas for a number of these species.

220. Commission staff determined that the projects are *not likely to adversely affect* 17 listed species, and are *not likely to adversely affect* critical habitat designated for

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[450] *See* Final EIS at Appendix I.

[451] 16 U.S.C. § 1855(b)(4)(B) (2018); 50 C.F.R. § 600.920(k)(1) (2019).

[452] The eight recommendations recommended by staff are identical to terms and conditions included in NMFS's Incidental Take Statement. Compliance with the terms and conditions in the Incidental Take Statement is required by Environmental Condition 26.

[453] Final EIS at 5-5.

8 species.[454] Commission staff also determined that the projects are *not likely to jeopardize the continued existence* of 3 species proposed for listing and are *not likely to adversely modify* proposed critical habitat for 4 species.[455] Additionally, Commission staff determined that the projects are *likely to adversely affect* 16 listed species and are *likely to adversely affect* critical habitat designated for 5 species.[456]

221. As required by section 7 of the Endangered Species Act, Commission staff submitted a Biological Assessment to FWS and NMFS on July 29, 2019.[457] Commission staff requested concurrence with its *not likely to adversely affect* determinations and initiation of formal consultation regarding its *likely to adversely affect* determinations. On January 10 and January 31, 2020, NMFS and FWS, respectively, provided their Biological Opinions for the projects.[458]

222. In its Biological Opinion, NMFS determined that the projects are *likely to adversely affect* 9 listed species, including 5 whale species (blue whale, fin whale, humpback whale – Central American DPS, humpback whale – Mexican DPS, and sperm whale) and 4 fish species (Coho salmon – Southern Oregon/North California coast (ESU, Coho salmon – Oregon Coast ESU, Pacific eulachon – Southern DPS, and green sturgeon – Southern DPS). Further, NMFS determined that the projects are *likely to adversely affect* critical habitat for 3 listed species (Coho salmon – Southern Oregon/North California coast ESU, Coho salmon – Oregon Coast ESU, and green sturgeon – Southern DPS). For those 9 species and 3 critical habitat designations, NMFS determined that the

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[454] *Id.* at Table 4.6.1-1.

[455] *Id.* Oregon DLCD expresses concern regarding the impact of constructing and operating the LNG Terminal on the coastal marten, which the FWS proposed to list as a threatened species in October 2018. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 14, 16. The final EIS discusses the LNG Terminal impacts on the coastal marten. Final EIS at 4-322 to 4-326. The final EIS states that surveys have not documented coastal martens at the LNG Terminal site. *Id.* at 4-323. Further, coastal marten species may benefit from proposed mitigation measures, including trash removal to reduce the potential for attracting predator species, *id.* at 4-324, and limiting the speed limit to 15 miles per hour for earthmoving equipment during construction, *id.*

[456] Final EIS at Table 4.6.1-1

[457] Information in the Biological Assessment was supplemented through responses to additional information requests.

[458] FWS originally submitted its Biological Opinion on January 17, 2020. On January 31, 2020, FWS submitted a revised Biological Opinion, which superseded its January 17 Biological Opinion.

projects would not likely jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitats, and, accordingly, NMFS provided an Incidental Take Statement. Environmental Condition 26 requires Jordan Cove and Pacific Connector to adhere to the Incidental Take Statement, including the reasonable and prudent measures and terms and conditions provided for listed species.[459]

223. In its Biological Opinion, FWS determined that the projects are *likely to adversely affect* 9 listed species, including 3 bird species (Western snowy plover, marbled murrelet, and northern spotted owl), 2 fish species (Lost River sucker and shortnose sucker), 1 invertebrate (vernal pool fairy shrimp), and 3 plant species (Applegate's milk-vetch, Gentner's fritillary, and Kincaid's lupine). Further, FWS determined that the projects are *likely to adversely affect* critical habitat for 5 listed species (Western snowy plover, marbled murrelet, northern spotted owl, Lost River sucker, and shortnose sucker).[460] For those 9 species and 5 critical habitat designations, FWS determined that the projects would not likely jeopardize the continued existence of the species or result in the destruction or adverse modification of critical habitats, and, accordingly, FWS provided Incidental Take Statements. Environmental Condition 26 requires Jordan Cove and Pacific Connector to adhere to the Incidental Take Statements, including the reasonable and prudent measures and terms and conditions provided for listed species.

224. With implementation of the measures in NMFS and FWS's Incidental Take Statements, we conclude our consultation with NMFS and FWS under section 7 of the Endangered Species Act is complete.

225. In addition, the final EIS recommends several measures to mitigate impacts on listed species. We adopt those recommendations as mandatory conditions in the appendix to this order. Environmental Condition 23 requires Jordan Cove to file a *Marine Mammal Monitoring Plan*, which will describe how the presence of whales will be determined during construction and will identify measures Jordan Cove will take to

[459] The final EIS's environmental recommendation 26, which stipulated that Jordan Cove and Pacific Connector not complete construction until Commission staff completes consultation under the Endangered Species Act, is no longer necessary and is removed.

[460] Oregon DLCD expresses concern regarding the LNG Terminal impacts on the Western snowy plover. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 15. As stated above, FWS determined that the LNG Terminal would not likely jeopardize the continued existence of the Western snowy plover or result in the destruction or adverse modification of its designated critical habitat. Further, FWS issued an Incidental Take Statement for the Western snowy plover that requires Jordan Cove to comply with terms and conditions, including measures to address noise and predation. *See* FWS's January 31, 2020 Revised Biological Opinion at 204-207.

reduce potential noise effects on whales and other marine mammals.[461] Environmental Condition 24 requires Pacific Connector to file its commitment to adhere to FWS-recommended timing restrictions within threshold distances of marbled murrelet and northern spotted owl stands during construction, operation, and maintenance of pipeline facilities.[462] Additionally, Environmental Condition 25 requires Pacific Connector to conduct surveys for marbled murrelet and northern spotted owl habitat that may be affected by the Pacific Connector Pipeline.

226. The Jordan Cove LNG Terminal could impact marine mammals, which are protected under the Marine Mammal Protection Act (MMPA).[463] Jordan Cove proposes a number of measures to minimize impacts on marine mammals, and, as noted above, Environmental Condition 23 requires Jordan Cove to develop a *Marine Mammal Monitoring Plan*. Pursuant to the MMPA, consultation with NMFS regarding impacts on marine mammals is ongoing; NMFS may issue an incidental take authorization under the MMPA.

227. The final EIS identifies 13 state-listed threatened or endangered species with the potential to occur in the project area.[464] Based on the applicants' proposed mitigation,

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[461] Oregon DLCD states that it "advocated for expanding the scope of the recommended Marine Mammal Monitoring Plan to include consideration of the effects of noise on resident populations of adult and juvenile harbor seals . . . ." Oregon DLCD's February 20, 2020 Federal Consistency Determination at 13. Because Environmental Condition 23 applies to "other mammals" including Pacific harbor seals, we find that Oregon DLCD's concern is addressed.

[462] Oregon DLCD implies that the timing restriction for tree removal within the breeding season is the only mitigation measure to address impacts to the marbled murrelet and spotted owl. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 18. Oregon DLCD is mistaken. Jordan Cove and Pacific Connector are required to comply with FWS's Incidental Take Statements that include additional terms and conditions, including requiring the applicants to avoid suitable and recruitment habitat, provide education and outreach materials, and make physical improvements to reduce corvid predation. *See* FWS's January 31, 2020 Revised Biological Opinion at 104-109; 168-169.

[463] *See* final EIS at 4-239, 4-257 to 4-261, and 4-329 to 4-334.

[464] *Id.* at 4-378.

minimization, and avoidance measures, the final EIS concludes that the projects would not significantly affect these species.[465]

### 8. Land Use

228. The Jordan Cove LNG Terminal site consists of a combination of brownfield decommissioned industrial facilities, an existing landfill requiring closure, open water, open land, and an area of forested dunes.[466] The nearest residence to the LNG terminal would be 1.1 miles away.[467] There are no planned residential or commercial developments within 0.25 mile of the project site.[468]

229. The Pacific Connector Pipeline will cross a variety of land uses including forest land, rangeland, agricultural lands, and developed lands.[469] Construction workspace will be located within 50 feet of seven residences, two of which are abandoned and would be removed by Pacific Connector.[470] Construction of the project will impact agricultural, commercial private forestlands, and residential lands, but Pacific Connector proposes numerous measures to minimize and mitigate impacts on these lands.[471]

230. The Jordan Cove LNG Terminal and a portion of the Pacific Connector Pipeline will be constructed within a designated coastal zone.[472] Accordingly, the projects are subject to a consistency review under the Coastal Zone Management Act. The Oregon DLCD is the designated state agency that implements the Oregon Coastal Management Program and undertakes the CZMA consistency review in Oregon.

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[465] *Id.* at 5-6; *see also id.* at 4-378 to 4-388.

[466] *Id.* at 4-424 to 4-425.

[467] *Id.* at 4-430. One residence would be located approximately 20 feet from the Kentuck project and another would be located approximately 30 feet from the North Bank site; neither residence is expected to be affected by project-related construction or operation.

[468] *Id.* at 4-434.

[469] *Id.* at 4-435.

[470] *Id.* at 4-441.

[471] *See id.* at 4-438 to 4-446.

[472] *Id.* at 4-430 and 4-441.

231. On April 11, 2019, the applicants submitted joint CZMA certifications to Oregon DLCD. On February 19, 2020, Oregon DLCD objected to the applicants' consistency certification on the basis that the applicants have not established consistency with specific enforceable policies of the Oregon Coastal Management Program and that it is not supported by adequate information. This decision can be appealed to the U.S. Secretary of Commerce. Oregon DLCD's objection also appears to be without prejudice. The final EIS recommends, and we require in Environmental Condition 27, the applicants file, prior to beginning construction, a determination of consistency with the Coastal Zone Management Plan issued by the State of Oregon.

232. The Pacific Connector Pipeline will cross approximately 31 miles of Forest Service lands within the Umpqua, Rogue River, and Winema National Forests, and 47 miles of lands managed by BLM within the Coos Bay, Roseburg, Medford, and Lakeview Districts.[473] Forest Service operates the lands under Land and Resource Management Plans (LRMPs)[474] and BLM operates the lands under Resource Management Plans (RMPs).[475] Forest Service and BLM analyzed amending their LRMPs and RMPs, respectively, to allow for the project to be sited within their lands, and solicited comments on the proposed amendments during the draft EIS comment period.[476] Forest Service and BLM will make final decisions on the respective authorizations before them, and Pacific Connector must obtain a right-of-way grant from BLM to cross federal lands, which may include compensatory mitigation requirements recommended by the Forest Service.[477]

233. Construction and operation of the projects will have both temporary and permanent effects on land uses.[478] Some permanently affected lands will be able to resume previous land uses, and other lands will be permanently converted to

[473] *Id.* at 4-50 to 4-51.

[474] The lands affected by the Pacific Connector Pipeline are operated under the Umpqua National Forest LRMP, Rogue River National Forest LRMP, and the Winema National Forest LRMP.

[475] The lands affected by the Pacific Connector Pipeline are operated under the Southwestern Oregon RMP and the Northwestern and Coastal RMP.

[476] Final EIS at ES-3.

[477] *Id.* at 2-33 to 2-34 and 2-41.

[478] *Id.* at 4-552.

industrial/commercial use, precluding previous land uses.[479] The final EIS concludes that the projects would not significantly affect land use.[480]

### 9. Recreation and Visual Resources

234. In the vicinity of the Jordan Cove LNG Terminal, there are BLM-managed Recreation Management Areas, Forest Service-managed lands (including the Oregon Dunes National Recreation Area within the Siuslaw National Forest), and state and local forests and parks.[481] Pile-driving noise associated with construction, as well as other construction-related activities, could temporarily affect the quality of the recreation experience at these sites.[482] In addition, construction could temporarily increase traffic and travel time for individuals using the Trans-Pacific Parkway to access recreation sites.[483] Effects on recreational boaters could occur during construction of the slip, access channel, and modifications to the Coos Bay Federal Navigation Channel, but would be temporary and affect a limited area.[484] Project operation could cause short-term, occasional impacts on recreational boaters, as boaters will be required to avoid LNG carriers in transit within the waterway.[485]

235. The Pacific Connector Pipeline will be in the vicinity of some state and local recreation areas, and, as noted above, will cross through parts of three National Forests and four BLM districts.[486] In addition, the route will cross three federally designated scenic byways (the Pacific Coast, Rogue-Umpqua, and Volcanic Legacy Scenic Byways), a designated Wild and Scenic River (the Rogue River), the Pacific Crest

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[479] *Id.* at 5-6.

[480] *Id.*

[481] *Id.* at 4-553 to 4-558.

[482] *Id.* at 4-558.

[483] *Id.* at 4-559.

[484] *Id.* at 4-561 to 4-562.

[485] *Id.* at 4-562. Oregon DLCD expresses concern regarding the LNG Terminal's effect on recreation and tourism. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 24, 27. As discussed above, the final EIS considers the project impacts on recreation and tourism and finds the impacts would be short-term and temporary.

[486] Final EIS at 4-563 to 4-566.

National Scenic Trail, and a water trail within the Coos Bay Estuary.[487] Pacific Connector proposes to cross two of the scenic byways, the Rogue River, and the Coos Bay Water Trail using HDD to avoid or minimize impacts at these areas.[488] To minimize impacts on the Pacific Crest National Scenic Trail and to control off-highway vehicle use on the pipeline right-of-way, Pacific Connector proposes to implement a number of measures included in its *Recreation Management Plan*.[489]

236. The final EIS concludes that the projects would result in impacts on recreation resources but, based on the applicants' proposed construction, mitigation, and operation procedures, the impacts would not be significant.[490]

237. Construction and operation of the Jordan Cove LNG Terminal will result in substantial short-term and long-term changes to the existing landscape within the view of the project.[491] The most visible components of the terminal will be the LNG storage tanks and nighttime lighting.[492] Adverse visual effects could be experienced by residents in the area and recreational users on Coos Bay. Although Jordan Cove attempted to mitigate for the visibility of project features (such as through use of landform contouring and stabilization, vegetative screening, architectural treatments, and hooded lighting), the final EIS concludes that, based on the size and location of the facilities, the Jordan Cove LNG Terminal would significantly affect visual resources for some views and viewing locations.[493]

238. Construction and operation of the Pacific Connector Pipeline will result in short-term and long-term visual effects, which will be greatest in areas where the new right-of-way would create new clearings through forestlands not characterized by large-scale

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[487] *Id.* at 4-563 and 4-566 to 4-571.

[488] *Id.* at 4-563 to 4-564 and 4-567 to 4-568.

[489] *Id.* at 4-570 to 4-571.

[490] *Id.* at 4-578.

[491] *Id.* at 4-608. Oregon DLCD raises concerns regarding the visual impacts of the LNG Terminal. *See* Oregon DLCD February 20, 2020 Federal Consistency Determination at 25-26. As discussed above, the final EIS and this order consider these impacts.

[492] Final EIS at 5-7.

[493] *Id.* at 4-608.

timber harvests.[494] Revegetation and restoration of the right-of-way, including replacement of slash, will be initiated following construction and will mitigate the visual contrast in color, line, and texture.[495] Pacific Connector will implement measures like structure co-location, painting, landscaping, and screening to limit the visual effects of aboveground facilities associated with the pipeline.[496] The final EIS concludes that, with implementation of Pacific Connector's *Aesthetics Management Plan*, construction and operation of the Pacific Connector Pipeline would not significantly affect visual resources.[497]

### 10. Socioeconomics

239. Construction and operation of the projects will result in impacts on socioeconomic resources.[498] Temporary impacts during construction will include increased demand for local services, including law enforcement, fire protection, and health care providers.[499] When considered together, construction of the Jordan Cove LNG Terminal and Pacific Connector Pipeline could cause significant effects (additional usage) to short-term housing in Coos County.[500] Therefore, the final EIS recommends, and we require in Environmental Condition 28, the applicants designate a Construction Housing Coordinator to serve as a liaison between the applicants, contractors, and communities affected by the projects.[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

[494] *Id.* at 4-608 and 4-599.

[495] *Id.* at 4-599.

[496] *Id.* at 4-608.

[497] *See id.* at 4-601 and 4-608.

[498] *Id.* at 4-652.

[499] *Id.* at 5-7.

[500] *Id.* at 4-652.

[501] As an effort to reduce impacts on housing, Jordan Cove proposes to construct a Workforce Housing Facility at the South Dunes Site. The final EIS notes that estimating whether this Workforce Housing Facility, as well as other potential informal worker camps along the pipeline route, could lead to an increase in crime would be speculative. *Id.* at 4-610 to 4-611 and 4-630 to 4-631.

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 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]

240. 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.[506] The Commission is not one of the specified 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 this issue.[507]

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[502] *Id.* at 4-619, 4-644, and 4-652.

[503] *Id.* at 4-619 to 4-621, 4-644 to 4-645, and 5-8. Oregon DLCD expresses concern regarding impacts to ocean-based fisheries (including the Dungeness crab fishery), impacts to commercial oyster farms, and the effect of the Coast Guard's spatial restrictions on recreational and commercial fisheries. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 23-24, 27-30. The final EIS finds that long-term impacts on the crabbing industry from sedimentation is not expected to result in long-term or population-wide effects on crabs. Final EIS at 4-621. The final EIS discusses the Pacific Connector Pipeline's effect on commercial oyster farms and the avoidance measures and contingency mitigation plans. Final EIS at 4-645. 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. Final EIS at 4-620.

[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] *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, Executive Order No. 12898 (Feb. 11, 1994), reprinted at 59 Fed. Reg. 7629.

[507] *See* final EIS at 4-622 to 4-629 and 4-646 to 4-650.

241. Low-income and/or minority 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.[508] Tribal populations are considered an environmental justice population with the potential to be disproportionately affected by construction and operation of the projects as a result of their unique relationship with the surrounding areas.[509]

242. The final EIS concludes that construction and operation of the projects is not expected to result in disproportionately high and adverse human health or environmental effects on nearby communities, except that the temporary increased demand for rental housing in Coos Bay would likely be more acutely felt by low-income households.[510] As noted above, Environmental Condition 28 requires designation of a Construction Housing Coordinator to address construction contractor housing needs and potential impacts in each county affected by the projects.

### 11. Transportation

243. The increase in marine traffic associated with construction and operation of the Jordan Cove LNG Terminal, when combined with current deep-draft vessel traffic, will be less than historic ship traffic through the channel.[511] Construction of the terminal could temporarily impact motor vehicle traffic in the area.[512] To mitigate impacts on vehicular traffic, Jordan Cove will implement measures identified in its *Traffic Impact Analysis*.[513] In addition, the final EIS recommends, and we require in Environmental Condition 29, Jordan Cove file documentation, prior to beginning construction, that it has entered into a cooperative improvement agreement with the Oregon Department of Transportation and traffic development agreements with Coos County and the City of North Bend.

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[508] *Id.* at 4-626 to 4-627 and 4-647 to 4-648.

[509] *Id.* at 4-629 and 4-649 to 4-650.

[510] *Id.* at 4-628 to 4-629 and 4-649 to 4-650.

[511] *Id.* at 5-8.

[512] *Id.* at 4-654 to 4-656.

[513] *See id.* at 4-655 to 4-656.

244. The Southwest Oregon Regional Airport is located less than one mile from the terminal site.[514] In addition, LNG carriers heading to and from the LNG terminal would pass by the airport to the west and would dock to the north less than one mile from the airport. Because the terminal and associated construction equipment and LNG carriers would be within proximity to the airport and would exceed heights that trigger notice to the Federal Aviation Administration (FAA),[515] Jordan Cove submitted a notice to the FAA regarding its proposed equipment and the LNG carrier transits.[516] On May 7, 2018, the FAA made initial findings that the LNG carriers (at multiple locations during transit), LNG storage tanks, and other facilities are obstructions and would be presumed hazards to navigation.[517] Therefore, the final EIS concludes that operating the LNG Terminal could significantly impact Southwest Oregon Regional Airport operations.[518]

245. However, the FAA bases final determination of whether a proposal would or would not be a hazard to air navigation on the findings of a completed aeronautical study. Following issuance of the final EIS, the FAA completed aeronautical studies for the LNG carrier transits, LNG storage tanks, and other onsite equipment and buildings. On December 23, 2019, the FAA issued a "Determination of No Hazard to Air Navigation" for onshore equipment and buildings, and a "Determination of No Hazard to Air Navigation for Temporary Structure" for docked and transiting LNG carriers.[519]

246. For the 33 permanent onshore structures reviewed by the FAA, only five were found to have a height which might affect air navigation: the two LNG storage tanks, the Oxidizer, the Amine Contactor, and the Amine Regenerator. For these five structures,

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[514] *Id.* at 4-656.

[515] 14 C.F.R. § 77.9 (2019).

[516] Final EIS at 4-790.

[517] *Id.* at 4-657; *see also* Jordan Cove's May 10, 2018 Response to Commission Staff's April 20, 2018 Data Request.

[518] Final EIS at 5-12.

[519] 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. Oregon DLCD's concerns regarding flight hazards does not appear to have taken into account FAA's December 23, 2019 Determination of No Hazard to Air Navigation. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 31.

the FAA's aeronautical study determined that the structures would have no substantial adverse effects on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. The FAA's conclusion was partly based on Jordan Cove adhering to the FAA requirements on marking/lighting the structures. The FAA also based its conclusions on Jordan Cove indicating, in a July 29, 2019 submittal to the FAA, that it would reduce the height of the proposed LNG storage tanks to 181 feet above grade level. Therefore, we have updated environmental recommendation 47 in the final EIS, included as Environmental Condition 48 in this order, to require that, prior to construction of final design, Jordan Cove file updated LNG storage tank drawings for review and approval that reflect the updated elevations referenced in the FAA's permanent structure aeronautical studies.

247. For the LNG carrier transit route, the FAA's aeronautical studies determined that the proposed LNG carrier transit locations would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility. The FAA based this determination on aircraft not conducting takeoff or landing operations until LNG carriers have cleared a specific area. An existing Southwest Oregon Regional Airport Letter of Agreement is currently used to coordinate aircraft operations when ships that exceed 142 feet in height are transiting by the airport. As a condition of the FAA determination, the FAA requires that Jordan Cove sign a Letter of Agreement with the airport before LNG carriers begin operations. The FAA determinations also note that a signed Letter of Agreement would relieve Jordan Cove from repeatedly filing future airspace studies for ongoing LNG carrier operations. Therefore, we require in Environmental Condition 39 that, prior to receiving LNG carriers, Jordan Cove file an affirmative statement indicating that it has signed and executed a Letter of Agreement with the Southwest Oregon Regional Airport as stipulated by the FAA's determination for temporary structures.

248. Construction of the Pacific Connector Pipeline could temporarily impact project-area roads and users but, with implementation of Pacific Connector's mitigation measures, these impacts would not be significant.[520]

### 12. Cultural Resources

249. Commission staff consulted with Indian tribes that may attach religious or cultural significance to sites in the region or may be interested in potential impacts from the projects on cultural resources. The Commission received comments from the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, Coquille Indian Tribe, Cow Creek Band of Umpqua Indians, Confederated Tribes of the Grand Ronde

[520] Final EIS at 4-657 to 4-660 and 5-8.

Community of Oregon, Karuk Tribe, Klamath Tribes, Tolowa Dee-Ni' Nation, and Yurok Tribe.[521]

250. A number of tribes, as well as Native American individuals, expressed concerns with the proposals through comments made at the public scoping sessions and comments filed in the project dockets.[522] Throughout the proceedings, Commission staff consulted with the tribes listed above and held numerous meetings, both in person and via teleconference.[523]

251. Cultural resource surveys are not yet complete for the Jordan Cove LNG Terminal or the Pacific Connector Pipeline.[524] Surveys that have been completed have identified sites that require monitoring during construction or other mitigation prior to construction.[525] In addition, further study and testing has been recommended for some sites if avoidance cannot be achieved.[526]

252. The Commission has not yet completed the process of complying with the National Historic Preservation Act.[527] Consultation with Indian tribes, the Oregon State Historic Preservation Officer (SHPO), and other applicable agencies is still ongoing.[528] The final EIS recommends, and we require in Environmental Condition 30, the applicants 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 surveys, site evaluations and monitoring reports (as necessary), a revised ethnographic study, final Historic Properties Management Plans for both projects, a final *Unanticipated Discovery Plan*, and comments from the SHPO, interested Indian tribes, and applicable federal land-managing agencies; (2) the Advisory Council on Historic Preservation is afforded an opportunity to comment on the undertaking; and

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[521] *See id.* at 4-667 to 4-675.

[522] *See id.* at 4-666 to 4-667. Some of these concerns are summarized in the final EIS at 4-667 to 4-675.

[523] *See id.* at 4-666; *see also id.* at Appendix L, Table L-5.

[524] *Id.* at 4-678 to 4-683 and 5-9.

[525] *Id.* at 5-9.

[526] *Id.*

[527] *Id.* and 4-684 to 4-686.

[528] *Id.* at 5-9.

(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.

253. The final EIS concludes that construction and operation of the projects would have adverse effects on historic properties, but that an agreement document would be developed with the goal of resolving those impacts.[529] Commission staff distributed a draft agreement document to the Oregon SHPO, the Advisory Council on Historic Preservation, the applicants, federal land-managing agencies, and consulting Indian tribes on December 13, 2018.[530]

### 13. Air Quality and Noise

254. Construction of the Jordan Cove LNG Terminal may result in a temporary reduction in ambient air quality as a result of fugitive dust emissions and emissions from vehicles and marine vessels transporting workers, equipment, and construction materials.[531] Construction of the terminal will occur over a 5-year period, with concurrent emissions from commissioning and start-up occurring in year 5.[532] Construction of the Pacific Connector Pipeline will result in a temporary increase in emissions due to the combustion of fuel in vehicles and equipment, dust generated from soil disturbance, and general construction activities.[533] With implementation of the applicants' proposed best management practices, the final EIS concludes that construction of the projects would have a temporary, but not significant, impact on regional air quality and would not result in exceedance of the applicable National Ambient Air Quality Standards (NAAQS).[534]

255. Operational emissions from the Jordan Cove LNG Terminal and the Klamath Compressor Station will remain below thresholds requiring a Prevention of Significant Deterioration permit, but both projects would be considered Title V major sources for

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[529] *Id.*

[530] The draft MOA was also filed in the project dockets.

[531] *Id.* at 4-699.

[532] *Id.*

[533] *Id.* at 4-703.

[534] *Id.* at 5-9.

certain criteria pollutants and each will require a Title V Operating Permit.[535] The final EIS concludes that operation of the projects would result in impacts on regional air quality, but the impacts would not be significant and emissions would not result in exceedance of the applicable NAAQS.[536]

256. Noise levels associated with construction of the Jordan Cove LNG Terminal will vary depending on the activity, with the highest levels of noise occurring during pile-driving work.[537] There are no Noise Sensitive Areas (NSAs) within one mile of the Jordan Cove LNG Terminal site.[538] The final EIS evaluates project-related noise at three representative NSAs near the site, as well as two other sites sensitive to sound level impacts (a recreation area and critical wildlife habitat for the western snowy plover).[539] The final EIS recommends, and we require in Environmental Condition 31, Jordan Cove limit pile-driving activities to between the hours of 7:00 a.m. and 10:00 p.m.[540] The final EIS concludes that noise impacts from pile-driving on the Coos Bay area would be significant, even with the inclusion of the time restriction required by Condition 31.[541] Operation of the Jordan Cove LNG Terminal is not expected to result in noise levels at

[535] *Id.* at 4-702 and 4-706.

[536] *Id.* at 4-709 and 5-9 to 5-10. Oregon DLCD states that transportation, storage, and liquefaction of natural gas will expose workers and adjacent communities to numerous toxic air pollutants. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 18. Because operational emissions from the Jordan Cove LNG Terminal and the Klamath Compressor Station will be subject to a Title V Operating Permit and will not exceed applicable NAAQS, which EPA established to protect human health, we are satisfied that the projects will not significantly affect air quality for workers or adjacent communities.

[537] Final EIS at 4-716 to 4-717. Oregon DLCD also raises concerns regarding construction noise impacts. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 26.

[538] Final EIS at 4-713.

[539] *Id.*

[540] Jordan Cove notes that this limitation in hours could require pile-driving activities to occur over a four-year period, as opposed to a two-year period. *Id.* at 4-717. The final EIS concludes that, without this limitation, extremely high nighttime noise levels would result in a severe impact on thousands of residents, and, therefore, the limitation is necessary. *Id.* at 4-719.

[541] *See id.* at 4-717 to 4-721.

the nearest NSA exceeding the Commission's limit of a day-night average sound level ($L_{dn}$) 55 A-weighted decibels (dBA).[542] To ensure that noise impacts associated with operation are not significant, Environmental Condition 32 requires Jordan Cove file a full power load noise survey after placing the terminal into service.[543]

257. Noise impacts associated with construction of the Pacific Connector Pipeline are expected to last between 12 and 18 months;[544] due to the assembly-line nature of pipeline construction, activities in any area could occur intermittently over a period lasting from several weeks to a few months.[545] Construction noise will be audible to NSAs along the pipeline route, but construction will generally be limited to daytime hours (i.e., 7:00 a.m. to 7:00 p.m.).[546] HDD activities could occur at nighttime and could exceed the Commission's $L_{dn}$ 55 dBA limit at nearby NSAs without mitigation.[547] To ensure mitigation measures implemented at the HDD locations reduce noise at the nearby NSAs, Environmental Condition 33 requires Pacific Connector file a site-specific noise mitigation plan prior to drilling activities at HDD sites, as well as bi-weekly reports during the drilling activities. Operation of the Klamath Compressor Station will result in noise impacts on nearby NSAs, but Pacific Connector will implement mitigation measures to reduce noise and meet the Commission's $L_{dn}$ 55 dBA limit.[548] To ensure that noise impacts associated with operation are not significant, Environmental Condition 34 requires Pacific Connector file a noise survey after placing the Klamath Compressor Station into service.[549]

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[542] *Id.* at 5-10.

[543] Oregon DLCD expresses concern regarding operational noise impacts stating "[o]nce built the LNG Export Terminal would operate continuously, generating very high noise levels." *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 26. We address this concern above.

[544] Final EIS at 4-727.

[545] *Id.* at 5-10.

[546] *Id.* at 4-728.

[547] *Id.* at 4-729 to 4-730.

[548] *Id.* at 4-733 to 4-734.

[549] Environmental Condition 34 was changed slightly from the recommendation in the final EIS to clarify that, if a full noise survey cannot be completed with 60 days of placing the Klamath Compressor Station into service, the full noise survey shall be filed no later than 60 days after all liquefaction trains at the LNG Terminal are fully in service.

### 14. Greenhouse Gas Emissions

258. With respect to impacts from greenhouse gases (GHGs), the final EIS estimates the GHG emissions from construction and operation of the projects,[550] includes a qualitative discussion of the various potential climate change impacts in the region,[551] and discusses the regulatory structure for GHGs under the Clean Air Act.[552]

259. The final EIS estimates that operation of the projects, including the LNG Terminal and pipeline facilities, may result in GHG emissions of up to 2,145,387 metric tonnes per year of carbon dioxide equivalent ($CO_2e$).[553] To provide context to the direct and indirect[554] GHG estimate, according to the national net $CO_2e$ emissions estimate in the EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (2019), 5.743 billion metric tonnes of $CO_2e$ were emitted at the national level in 2017 (inclusive of $CO_2e$ sources and sinks).[555] The operational emissions of these facilities could potentially increase annual $CO_2e$ emissions based on the 2017 levels by approximately 0.0374 percent at the national level. Currently, there are no national targets to use as benchmarks for comparison.[556]

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The Klamath Compressor Station will not be in full-load condition until the LNG Terminal is either commissioning or operating all five liquefaction trains simultaneously.

[550] Final EIS at Table 4.12.1.3-1 (LNG Terminal construction emissions), Table 4.12.1.3-2 (LNG Terminal operation emissions), Table 4.12.1.4-1 (pipeline facilities construction emissions), and Table 4.12.1.4-2 (pipeline facilities operation emissions).

[551] *Id.* at 4-848 to 4-851.

[552] *Id.* at 4-687 to 4-694.

[553] *Id.* at Tables 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1, and 4.12.1.4-2. $CO_2e$ emissions in the final EIS are expressed in short tons, which have been converted to metric tons in this order so the emissions may be viewed in context with the EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks*.

[554] Indirect GHG emissions are from vessel traffic associated with the project.

[555] EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2017*, at ES-6 to ES-8 (2019), https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf.

[556] The national emissions reduction targets expressed in the EPA's Clean Power Plan were repealed, Greenhouse Gas Emissions From Existing Electric Utility Generating

260. In 2007, the State of Oregon enacted legislation establishing a state policy to meet the following three goals to reduce greenhouse gas emissions: (1) by 2010, arrest the growth of Oregon's greenhouse gas emissions and begin to reduce greenhouse gas emissions; (2) by 2020, achieve greenhouse gas levels that are 10 percent below 1990 levels (for a target total emissions of 51 million metric tonnes of $CO_2e$); and (3) by 2050, achieve greenhouse gas levels that are 75 percent below 1990 levels (for a target total emissions of 14 million metric tonnes of $CO_2e$).[557] The legislation, however, did not create any additional regulatory authority to meet its goals, and we are unaware of any measures Oregon has enacted to meet its goals that would apply to natural gas or LNG facilities.[558]

261. As noted above, the Jordan Cove LNG Terminal and the Pacific Connector Pipeline will result in annual $CO_2e$ emissions of about 2.14 million metric tonnes of $CO_2e$. These annual emissions would impact the State's ability to meet its greenhouse gas reduction goals as the annual emissions would represent 4.2 percent and 15.3 percent of Oregon's 2020 and 2050 GHG goals, respectively.[559] Because we are unaware of any measures that Oregon has established to reduce GHGs directly emitted by natural gas or LNG facilities, we will not require the applicants to mitigate the impact on Oregon's ability to meet its GHG emission goals.

262. Furthermore, although an important consideration as part of our NEPA analysis, Oregon's emission goals are not the same as an objective determination that the GHG emissions from the projects will have a significant effect on climate change. The final EIS acknowledges that the quantified GHG emissions from the construction and operation of the projects will contribute incrementally to climate change.[560] However, as the Commission has previously concluded, we have neither the tools nor the expertise to determine whether project-related GHG emissions will have a significant impact on

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Units; Revisions to Emissions Guidelines Implementing Regulations, 84 Fed. Reg. 32,520, 32,522-32, 532 (July 8, 2019), and the targets in the Paris climate accord are pending withdrawal.

[557] The Oregon Global Warming Commission projects that Oregon will fall short of these goals without additional legislative action. Final EIS at 4-851.

[558] OR. REV. STAT. § 468A.205 (2007).

[559] Final EIS at 4-851; *see also* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 32-33.

[560] Final EIS at 4-850.

climate change and any potential resulting effects, such as global warming or sea rise.[561] The Commission has also previously concluded it could not determine whether a project's contribution to climate change would be significant.[562]

### 15. Reliability and Safety

263. As part of the NEPA review, Commission staff assessed potential impacts to the human environment in terms of safety and whether the proposed facilities would operate safely, reliably, and securely. Commission staff conducted a preliminary engineering and technical review of the Jordan Cove LNG Terminal, including potential external impacts based on the site location. Based on this review, the final EIS recommends mitigation measures for implementation prior to initial site preparation, prior to construction of final design, prior to commissioning, prior to introduction of hazardous fluids, prior to commencement of service, and throughout the life of the facility, to enhance the reliability and safety of the facility. With these measures, the final EIS concludes that acceptable layers of protection or safeguards would reduce the risk of a potentially hazardous scenario from developing that could impact the offsite public.[563] These recommendations have been adopted as mandatory conditions in the appendix to this order.

264. The applicants state that the proposed projects would be designed, constructed, operated, and maintained to meet or exceed Coast Guard Safety Standards,[564] the DOT Minimum Federal Safety Standards,[565] and other applicable federal and state regulations.[566] 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.[567] If

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[561] *Rio Grande LNG, LLC*, 170 FERC ¶ 61,046, at P 108 (2020).

[562] *Id.*

[563] Final EIS at 5-11.

[564] 33 C.F.R. pts. 105 and 127 (2019).

[565] 49 C.F.R. pts. 192 and 193 (2019).

[566] *See* final EIS at 1-21 to 1-28 (Table 1.5.1-1) (summarizing the major federal, state, and local permits, approvals, and authorizations required for construction and operation of the projects).

[567] *See* Commission staff's June 1, 2018 Memo filed in Docket No. CP17-495-000 (containing the Coast Guard's May 10, 2018 Letter of Recommendation).

the Jordan Cove LNG Terminal is authorized and constructed, the facility would be subject to the Coast Guard's inspection and enforcement program to ensure compliance with the requirements of 33 C.F.R. Parts 105 and 127.[568]

265. Further, as described above,[569] PHMSA determined that the siting of the proposed Jordan Cove LNG Terminal complies with the applicable federal safety standards contained in Title 49 C.F.R. 193.[570] PHMSA's Letter of Determination summarizes its evaluation of the hazard modeling results and endpoints used to establish exclusion zones, as well as its review of Jordan Cove's evaluation of potential incidents and safety measures that could have a bearing on the safety of plant personnel and the surrounding public.[571]

266. The Pacific Connector Pipeline will be designed, constructed, operated, and maintained in accordance with the DOT Minimum Federal Safety Standards. These regulations, which are intended to protect the public and to prevent natural gas facility accidents and failures, include specifications for material selection and qualification, minimum design requirements, and protection of pipelines from corrosion. Accordingly, the final EIS concludes that Pacific Connector's compliance with the DOT's safety standards would ensure that construction and operation of the Pacific Connector Pipeline would not have a significant impact on public safety.[572]

### 16. Cumulative Impacts

267. The final EIS considers the cumulative impacts of the proposed Jordan Cove LNG Terminal and Pacific Connector Pipeline with other projects in the same geographic and temporal scope of the projects.[573] The types of other projects evaluated in the final EIS

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[568] 33 C.F.R. pts. 105 and 127.

[569] *See supra* P 41.

[570] *See* 49 C.F.R. pt. 193, Subpart B (2019).

[571] Oregon DLCD raises safety concerns related to the location of the LNG Terminal. *See* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 29-30. We find that the Coast Guard's Letter of Recommendation, PHMSA's Letter of Determination, and our engineering review on the use of various layers of protection or safeguards discussed in the final EIS address the issues raised by Oregon DLCD. *See* Final EIS at 4-738 to 4-808.

[572] Final EIS at 5-11.

[573] *Id.* at 4-822 to 4-852.

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.[574] As part of the cumulative impact 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.[575]

268. 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.[576] However, 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.[577]

### 17. Alternatives

269. The final EIS evaluates numerous alternatives to the proposed projects, including the No-Action Alternative, system alternatives, LNG terminal site alternatives, and pipeline route alternatives and variations.[578] The final EIS concludes that, with the exception of one pipeline variation, the alternatives analyzed would either not meet the

[574] *Id.* at 4-825.

[575] *Id.* at 4-828. The modifications to the Coos Bay Federal Navigation Channel include the Corps' Port of Coos Bay Channel Modification Project. *Id.* at 8-828, 8-836; *see also* Oregon DLCD's February 20, 2020 Federal Consistency Determination at 32.

[576] Final EIS at 4-852.

[577] *Id.* The final EIS also determined that the projects could have significant cumulative impacts on the Southwest Oregon Regional Airport. Based on determinations made by the FAA after issuance of the final EIS, we no longer conclude the projects could have significant cumulative impacts the airport. *See supra* PP 244- 247.

[578] *Id.* at 3-1 to 3-52.

projects' purpose and need, would not be technically feasible, or would not offer a significant environmental advantage.[579]

270. The final EIS does recommend one pipeline route variation: the Blue Ridge Variation. The 15.2-mile-long Blue Ridge Variation would deviate from the proposed route at MP 11 and would rejoin the proposed route near MP 25.[580] The Blue Ridge Variation is longer than the proposed route and crosses more than double the number of private parcels and miles of private lands.[581] In addition, the Blue Ridge Variation crosses more perennial waterbodies, known and assumed anadromous fish-bearing streams, and acres of wetlands.[582] However, the Blue Ridge Variation crosses less old-growth forest than the proposed route, and accordingly, substantially reduces the number of acres of occupied and presumed occupied marbled murrelet stands and acres of northern-spotted owl nesting, roosting, and foraging habitat that would be removed.[583]

271. The primary tradeoffs between the proposed route and the Blue Ridge Variation relate to terrestrial resources and aquatic resources and private lands.[584] Construction and operation of the proposed route would result in a permanent loss of old-growth forest and would adversely affect the marbled murrelet; there are minimal options for avoiding or reducing these impacts.[585] Conversely, impacts on aquatic resources under the Blue Ridge Variation would be temporary to short-term and could be minimized with implementation of the applicants' *Plan*, *Procedures*, and Pacific Connector's *Erosion Control and Revegetation Plan*.[586] Although the Blue Ridge Variation crosses more private lands, only one residence is within 50 feet of the construction right-of-way and, as discussed above, Pacific Connector will implement a number of measures to reduce impacts and facilitate restoration of the right-of-way.[587]

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[579] *Id.*

[580] *Id.* at 3-24.

[581] *Id.*

[582] *Id.*

[583] *Id.*

[584] *Id.*

[585] *Id.* at 3-25.

[586] *Id.*

[587] *Id.*

272. Based on the tradeoffs between the proposed route and the Blue Ridge Variation, the difference between the impacts in terms of temporal effects, as well as the scope of avoidance, minimization, and mitigation for these effects, and the magnitude of the effects, the final EIS concludes that the Blue Ridge Variation results in a significant environmental advantage compared to the proposed route.[588] We agree. Environmental Condition 16 requires Pacific Connector file alignment sheets incorporating the Blue Ridge Variation into its proposed route.

### C. Comments Received After Issuance of the Final EIS

273. As noted above, between issuance of the final EIS and December 31, 2019, the Commission received comments on the final EIS from the applicants,[589] the Pacific Fishery Management Council, EPA, Oregon Department of Justice (on behalf of certain Oregon state agencies), two individuals, and the Cow Creek Band of Umpqua Tribe of Indians.[590]

#### 1. Applicants' Comments

274. In their comments on the final EIS, the applicants request that the Commission not require the adoption of the Blue Ridge Variation into the pipeline route as recommended by staff. In support of their request, the applicants argue that the final EIS: (1) fails to account for the mitigation included in the applicants' proposed comprehensive mitigation plan; (2) fails to consider impacts in the context of BLM's 2016 Southwestern Oregon RMP; and (3) relies on improper habitat data and impact analysis that does not support

[588] *Id.* at 3-26.

[589] In part, the applicants requested minor modifications to the wording of recommendations 34 and 38 in the final EIS. As discussed above, we have modified the wording of Environmental Conditions 34 and 38 accordingly. *See supra* notes 549 and 380. These modifications are not discussed further.

[590] During this time, the Commission also received courtesy copies of comments filed to other federal and state agencies with permitting authority over the proposals. Those comments are not addressed below. However, throughout the order we address comments raised in Oregon DLCD's February 20, 2020 Federal Consistency Determination. We find that we have adequately considered Oregon DLCD's comments in our final EIS and in this order, and that we have satisfied our obligations under NEPA and the NGA. Our authorizations do not impact any substantive determinations that need to be made by Oregon under federal statutes. Jordan Cove and Pacific Connector must receive the necessary state approvals under the federal statutes prior to construction.

the finding that the variation is preferable. Mr. Sheldon, a landowner on the Blue Ridge Variation, filed comments supporting the applicants' comments.

275. As explained above, Environmental Condition 16 requires Pacific Connector to incorporate the Blue Ridge Variation into its proposed route. The applicants' assertion that the analysis in the final EIS supporting Environmental Condition 16 did not consider the applicants' comprehensive mitigation plan is unsupported. Additionally, the applicants overstate the significance of the plan as it relates to impacts along Blue Ridge. The plan attempts to mitigate impacts for the projects; and, although general impacts may be mitigated by the plan, the plan does not reduce the amount or significance of impacts resulting along Blue Ridge. Furthermore, the mitigation measures in the plan have limited applicability to the habitat impacts specific to the proposed Blue Ridge route because the plan primarily mitigates for impacts on National Forest System lands, none of which are located along Blue Ridge. Measures in the plan that are specific to BLM lands pertain to watershed and aquatic habitat impacts and, therefore, are also not applicable to the analysis of forested habitat impacts on the Blue Ridge.

276. Information relevant to and regarding BLM RMPs was included in the final EIS to support BLM's consideration of the proposed amendments to its RMPs. As noted above, in order for the pipeline to be sited within BLM lands, BLM must amend its RMPs; additionally, Pacific Connector must obtain a right-of-way grant from BLM to cross federal lands. Concerns with proposed amendments to BLM RMPs should be directed to BLM. BLM was a cooperating agency for NEPA purposes and, accordingly, participated in the development of the draft and final EIS and associated analyses.

277. With regard to the applicants' comment that the final EIS analysis relies on improper habitat data and impact analysis that does not support the final EIS's conclusion, we acknowledge that inconsistent data exists for the amount and quality of old-growth forest affected by the proposed route and its significance as marbled murrelet and northern spotted owl habitat. Staff assessed available information, consulted with the cooperating agencies regarding data quality and sufficiency, and based its analysis on the best available information.[591] Using this information, staff concluded that, when comparing the duration of impacts, the Blue Ridge Variation would be environmentally preferable to the corresponding proposed route. As stated above, staff's conclusion was based primarily on the differences between temporary impacts on aquatic resources along the variation versus long-term or permanent impacts on forested habitat along the proposed route. As discussed in sections 4.3.2.2 and 4.5.2.3 of the final EIS, construction and operation of the projects would result in impacts on surface waterbodies and associated aquatic resources including turbidity and sedimentation, channel and streambank integrity and stability, in-stream flow, risk of hazardous material spills,

[591] We note that much of the data provided by the applicant for the Blue Ridge area was not collected according to FWS protocol.

potential regulatory status changes, and restrictions on fish passage. Generally, these impacts are temporary, occurring primarily during and immediately following active construction, and would be negligible once the waterbody banks and adjacent right-of-way are restored and successfully revegetated. As discussed in section 4.4.2.1 of the final EIS, impacts on forested habitat in general and old-growth specifically, would last for decades (80+ years) in temporary work areas, and would be a permanent impact within the maintained operational right-of-way. For these reasons, we find that staff's analysis appropriately considered available information, and, in Environmental Condition 16, we require that Pacific Connector incorporate the Blue Ridge Variation into its proposed route.

278. The applicants also request that the Commission remove the requirement to designate a Construction Housing Coordinator. The applicants argue that the recommendation is unwarranted because the projects would not have a significant impact on housing in the Coos Bay area. The applicants state that the analysis in the final EIS does not reflect the fact that "many local residents will be able to afford rental units associated with higher income brackets" because construction of the projects will create an economic stimulus and increase the incomes of many local residents.[592] They further argue that the final EIS did not take into consideration the less traditional housing options that may become available during construction.

279. The applicants' comments do not appear to account for the concurrent construction of the Jordan Cove LNG Terminal and Pacific Connector Pipeline in the Coos Bay area. We agree with the final EIS's determination that the combined and concurrent impact of these projects on demand for rental housing, although temporary, would be significant and would be likely more acutely felt by low-income households. Further, low-income households may not benefit from the potential economic stimulus associated with the projects. To address this impact, we require in Environmental Condition 28 that the applicants designate a Construction Housing Coordinator. Even with inclusion of this requirement, the final EIS concludes, and we agree, that impacts on short-term housing in Coos County would be significant.

280. In addition, the applicants state that the final EIS erroneously determined that the traditional cultural property proposed historic district known as "*Q'alya ta Kukwis schichdii me*" nominated by the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians should be treated as eligible for listing in the National Register of Historic Places (National Register). The applicants claim that this determination was not supported in the administrative record.

[592] Jordan Cove and Pacific Connector's December 6, 2019 Comments on the final EIS at 6.

281. As stated in the final EIS, the Oregon SHPO's finding that the traditional cultural property historic district is eligible for nomination to the National Register was conveyed to Commission staff in a letter dated July 19, 2019. That letter was filed in the Commission dockets for the proceedings, and thus the finding of eligibility is part of the administrative record.

282. The SHPO considered the arguments against the nomination of the traditional cultural property historic district raised by Jordan Cove, City of North Bend, Port of Coos Bay, and Confederated Tribes of Siletz Indians and dismissed them prior to making its finding of eligibility. Those arguments are not part of the administrative record that Commission staff considered when writing the final EIS because they were not filed in the proceedings until December 6, 2019. Nevertheless, staff acknowledged those objections to the nomination in its draft agreement document sent out for review by consulting parties on December 13, 2019. The National Park Service's rejection of the nomination for procedural and documentation deficiencies was noted in the final EIS.

283. Although the Commission determines if a property is eligible for listing, it does so in consultation with the SHPO. Generally, the Commission agrees with the opinions of the SHPO on findings of National Register eligibility and assessment of project effects. If a site is found to be eligible, it is considered to be a "historic property," in keeping with the definition in the regulations implementing Section 106 of the National Historic Preservation Act.[593]

284. Lastly, the applicants express concern with Commission staff's determination regarding the Franklin's bumble bee, which is a species newly proposed for listing under the Endangered Species Act.[594] Commission staff determined that construction and operation of the projects would not likely jeopardize the continued existence of the Franklin's bumble bee. Commission staff also made the provisional determination that, if the FWS lists the Franklin's bumble bee prior to completion of the projects, a *may affect, likely to adversely affect* determination would be warranted. The applicants claim that a "may affect" determination was not justified. We find that the applicants' comment is moot, as FWS subsequently made its own determination regarding the species based on Commission staff's determination as well as information provided by the applicant. In its Biological Opinion, FWS determined that the projects *may affect, but are not likely to adversely affect* the Franklin's bumble bee.

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[593] *See* 36 C.F.R. § 800.16(l) (2019).

[594] Staff's determination regarding the Franklin's bumblebee was made after issuance of the final EIS, in a December 2, 2019 Response to Data Gaps submittal to FWS.

### 2. Other Comments

285. In its comments on the final EIS, the Pacific Fishery Management Council (Council) reiterates its comments on the draft EIS and indicates that the projects will cause significant harm to EFH for several managed species (e.g., Chinook salmon, Coho salmon, rockfishes, English sole, lingcod and others) and that the projects' proposed wetland mitigation measures are not sufficient to offset the magnitude of loss or degradation to dozens of acres of estuarine habitat and many miles of riverine habitats. The Council also requests additional mitigation be required to avoid, minimize, and offset impacts on the environment. Lastly, the Council expresses concern that fishing vessel access to the Coos Bay Harbor will be constrained and requests additional information about how the LNG vessel safety zone will be implemented.

286. As noted above, the Commission consulted with NMFS regarding impacts on EFH. NMFS provided ten EFH conservation recommendation, eight of which are required by this order.[595] Further, as stated in the final EIS, the Commission defers to the Corps on wetland mitigation. The Corps and the Oregon Department of State Lands are currently working with the applicants on wetland mitigation requirements. Per the requirements of the Clean Water Act, the applicants must demonstrate that all impacts to wetlands are avoided or minimized to the extent practical as part of the Corps' 404 and 401 permitting processes. Additionally, the final EIS addresses impacts on commercial and recreational fishing vessels and concludes that impacts would occur but would not be significant. Regarding impacts to marine traffic, we defer to the Coast Guard, the entity responsible for regulating and managing safe vessel transit in Coos Bay.

287. In its comments, EPA Region 10 encourages the Commission to disclose all updated information concerning federal, state, and local permits to ensure the public and decision makers are fully informed about the potential impacts of the projects. All pertinent information received by the Commission regarding the projects has been included as appropriate in this order.

288. The Oregon Department of Justice, on behalf of certain Oregon state agencies, provided comments on the final EIS. These comments primarily reiterated comments made on the draft EIS concerning the projects' compliance with state requirements and guidance. As noted above, Pacific Connector and Jordan Cove would not be able to exercise the authorizations to construct and operate the projects until they receive all necessary federal and federally delegated state authorizations. We encourage our applicants to file for and receive the local and state permits, in good faith, as stewards of the community in which the facilities are located. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or

[595] *See supra* P 217.

unreasonably delay the construction of facilities approved by the Commission.[596] With respect to needed federal authorizations, Environmental Condition 11 requires the applicants to receive all applicable authorizations required under federal law prior to construction. Additionally, Environmental Condition 27 requires that the applicants file, prior to beginning construction, a determination of consistency with the Coastal Zone Management Plan by the State of Oregon.[597]

289. Many of the Oregon SHPO's comments, which were included with the Oregon Department of Justice's filing, reiterate its comments on the draft EIS, which were addressed in Appendix R of the final EIS. We disagree that consultations with the SHPO on the definition of the area of potential effect have not occurred. The regulations implementing the National Historic Preservation Act, 36 C.F.R. § 800.2(a)(3) allow the agency "to use the services of applicants, consultants, or designees to prepare information, analyses, and recommendations." As is Commission practice, applicants or their consultants prepare cultural resources reports and submit them to the SHPO. The SHPO then typically comments on those reports, either in letters to the applicants/consultants or to Commission staff. Those reviews constitute part of the consultation process. In the case of the area of potential impact, the SHPO had the opportunity to comment in writing on cultural resources reports that spelled out the applicants/consultant definition, as well as comment on the draft and final EIS, which provided the Commission's definition of the area of potential impact.

290. In addition, our response to the Advisory Council on Historic Preservation's January 25, 2018 letter concerning the issue of monitoring pre-construction/project planning geotechnical testing at the LNG terminal was included in the draft and final EIS. Lastly, the SHPO has had the opportunity to comment on recommendations of NRHP eligibility and project effects in its review of reports submitted by the applicants and/or its consultants. Commission staff's determinations of eligibility and effect were provided in section 4.11.3 of the final EIS. In all cases, staff agrees with the SHPO's opinions. On December 13, 2019, Commission staff sent the SHPO a draft agreement document that defines the process that would be used to resolve adverse effects on historic properties that may be affected by the undertaking.

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[596] *See, e.g.*, *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, at 243 (D.C. Cir. 2013) (holding state and local regulation is preempted by the NGA to the extent they conflict with federal regulation, or would delay the construction and operation of facilities approved by the Commission); *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990), *order on reh'g*, 59 FERC ¶ 61,094 (1992).

[597] *See supra* PP 230-231.

291. Two comment letters filed by the same individual, Ms. Jenny Jones, express concern with public safety, public need or benefit of the projects, noise impacts from pile-driving, and impacts on temporary housing. Public safety was addressed in section 4.13 of the final EIS, which, as noted above, concluded that acceptable layers of protection or safeguards would reduce the risk of a potentially hazardous scenario from developing that could impact the offsite public. The issue of the projects' public need or benefit is addressed elsewhere in this order.[598] Lastly, the final EIS and this order acknowledge the significant impacts that the projects would have on noise and housing availability in Coos Bay and require various measures to mitigate those impacts.[599]

292. The comments filed by the Cow Creek Band of Umpqua Tribe of Indians largely reiterate the tribe's comments on the draft EIS, which were addressed in Appendix R to the final EIS. The tribe expresses concern with the applicants' proposed mitigation for impacts to water resources and wetlands, and notes that some of the mitigation plans, as well as the Historic Properties Management Plan, are not yet final. As explained above, NEPA does not require a complete mitigation plan be actually formulated at the onset, but only that the proper procedures be followed for ensuring that the environmental consequences have been fairly evaluated.[600] Moreover, as explained above, Environmental Condition 30 requires that the applicants not begin construction of project facilities until, among other things, the applicants file the remaining cultural resource surveys, site evaluations and monitoring reports (as necessary), a revised ethnographic study, final Historic Properties Management Plans for both projects, a final *Unanticipated Discovery Plan*, and comments from the SHPO, interested Indian tribes, and applicable federal land-managing agencies. The draft agreement document, sent to the Cow Creek Band of Umpqua Tribe of Indians for review on December 13, 2019, also included stipulations that require the applicants to produce final versions of the Historic Properties Management Plans and *Unanticipated Discovery Plan* prior to construction.

### D. Environmental Analysis Conclusion

293. We have reviewed the information and analysis contained in the final EIS regarding potential environmental effects of the projects, as well as other information in the record. We are adopting the environmental recommendations in the final EIS, as modified herein, and include them as conditions in the appendix to this order. Compliance with the environmental conditions appended to our orders is integral to ensuring that the environmental impacts of approved projects are consistent with those anticipated by our environmental analyses. Thus, Commission staff carefully reviews

[598] *See supra* PP 40-43 and 83-87.

[599] *See supra* PP 256-257 and 239.

[600] *See supra* P 160.

all information submitted. Commission staff will only issue a construction notice to proceed with an activity when satisfied that the applicant has complied with all applicable conditions. We also note that the Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the projects, including authority to impose any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order, as well as the avoidance or mitigation of unforeseen adverse environmental impacts resulting from project construction and operation.[601]

294. We agree with the conclusions presented in the final EIS and find that if the projects are constructed and operated as described in the final EIS, the environmental impacts associated with the projects are acceptable considering the public benefits that will be provided by the projects. Accordingly, and for the reasons discussed throughout the order, we find 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.

295. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this authorization and Certificate. The Commission encourages cooperation between applicants and local authorities.

## VI. Conclusion

296. We find 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.

297. The Commission on its own motion received and made part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto, and all comments, and upon consideration of the record,

The Commission orders:

(A) In Docket No. CP17-495-000, Jordan Cove is authorized under section 3 of the NGA to site, construct, and operate the proposed project in Coos County, Oregon, as described and conditioned herein, and as fully described in Jordan Cove's application and subsequent filings by the applicant, including any commitments made therein.

[601] *See* Environmental Conditions 2 and 3.

(B) The authorization in Ordering Paragraph (A) above is conditioned on:

(1) Jordan Cove's facilities being fully constructed and made available for service within five years of the date of this order.

(2) Jordan Cove's compliance with the environmental conditions listed in the appendix to this order.

(C) In Docket No. CP17-494-000, a certificate of public convenience and necessity under section 7(c) of the NGA is issued to Pacific Connector authorizing it to construct and operate the proposed project, as described and conditioned herein, and as more fully described in Pacific Connector's application and subsequent filings by the applicant, including any commitments made therein.

(D) The certificate authorized in Ordering Paragraph (C) above is conditioned on:

(1) Pacific Connector's facilities being fully constructed and made available for service within five years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;

(2) Pacific Connector's compliance with all applicable Commission regulations, particularly the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations; and

(3) Pacific Connector's compliance with the environmental conditions listed in the appendix to this order.

(E) Pacific Connector's request for a blanket transportation certificate under Subpart G of Part 284 of the Commission's regulations is granted.

(F) Pacific Connector's request for a blanket construction certificate under Subpart F of Part 157 of the Commission's regulations is granted.

(G) Pacific Connector shall file a written statement affirming that it has executed firm contracts for the capacity levels and terms of service represented in its filed precedent agreement, prior to commencing construction.

(H) Pacific Connector's initial recourse rates, retainage percentages, and *pro forma* tariff are approved, as conditioned and modified above.

(I) Pacific Connector shall file actual tariff records that comply with the requirements contained in the body of this order at least 30 days prior to the commencement of interstate service consistent with Part 154 of the Commission's regulations.

(J) No later than three months after its first three years of actual operation of as discussed herein, Pacific Connector must make a filing to justify its existing cost-based firm and interruptible recourse rates. Pacific Connector's cost and revenue study should be filed through the eTariff portal using a Type of Filing Code 580. In addition, Pacific Connector is advised to include as part of the eFiling description, a reference to Docket No. CP17-494-000 and the cost and revenue study.

(K) Pacific Connector shall adhere to the accounting requirements discussed in the body of this order.

(L) Jordan Cove and Pacific Connector shall notify the Commission's environmental staff by telephone or e-mail of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Jordan Cove or Pacific Connector. Jordan Cove and Pacific Connector shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(M) The requests for a formal hearing and additional procedures are denied.

(N) The late, unopposed motions to intervene filed before issuance of this order in each respective docket are granted pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure.

(O) The motion filed by landowner-intervenors on April 19, 2019 is denied.

By the Commission. Commissioner Glick is dissenting with a separate statement attached. Commissioner McNamee is concurring with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.

## Appendix

## Environmental Conditions

As recommended in the final environmental impact statement (EIS), this authorization includes the following conditions:

1. Jordan Cove Energy Project L.P. (Jordan Cove) and Pacific Connector Gas Pipeline, LP (Pacific Connector) shall follow the construction procedures and mitigation measures described in their respective applications and supplemental filings (including responses to staff data requests), and as identified in the Environmental Impact Statement (EIS), unless modified by the Order Granting Authorizations Under Sections 3 and 7 of the Natural Gas Act (Order). Jordan Cove and Pacific Connector must:

    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);

    b. justify each modification relative to site-specific conditions;

    c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and

    d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification**.

2. For the liquefied natural gas (LNG) terminal, the Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of life, health, property, and the environment during construction and operation of the Jordan Cove LNG Project. This authority shall include:

    a. the modification of conditions of the Order;

    b. stop-work authority and authority to cease operation; and

    c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.

3. For the pipeline facilities, the Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Pacific Connector Pipeline Project. This authority shall allow:

a. the modification of conditions of the Order;

b. stop-work authority; and

c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation activities.

4. **Prior to any construction,** Jordan Cove and Pacific Connector shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, Environmental Inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

5. The authorized facility locations shall be as shown in the EIS, as supplemented by filed site plans and alignment sheets, and shall include the route variations identified in condition 16 below. **As soon as they are available, and before the start of construction,** Jordan Cove and Pacific Connector shall file with the Secretary any revised detailed site plan drawings and survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these site plan drawings.

   For the pipeline, Pacific Connector's exercise of eminent domain authority granted under Natural Gas Act (NGA) Section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Pacific Connector's right of eminent domain granted under NGA Section 7(h) does not authorize it to increase the size of its natural gas pipeline or facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

6. Jordan Cove and Pacific Connector shall file with the Secretary detailed site plan drawings, alignment maps/sheets, or aerial photographs at a scale not smaller than 1:6,000, identifying all route realignments, facility relocations, changes in site plan layout, staging areas, pipe storage yards, new access roads and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs.

Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to route variations required by the Order, extra workspace allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

a. implementation of cultural resources mitigation measures;

b. implementation of endangered, threatened, or special concern species mitigation measures;

c. recommendations by state regulatory authorities; and

d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

7. **Within 60 days of the Order and before construction begins**, Jordan Cove and Pacific Connector shall each file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Jordan Cove and Pacific Connector must file revisions to the plan as schedules change. The plan shall identify:

a. how Jordan Cove and Pacific Connector will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EIS, and required by the Order;

b. how Jordan Cove and Pacific Connector will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;

c. the number of EIs assigned, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;

d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;

e. the location and dates of the environmental compliance training and instructions Jordan Cove and Pacific Connector will give to all personnel involved with construction and restoration (initial and refresher training as

the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);

f. the company personnel (if known) and specific portion of Jordan Cove's and Pacific Connector's organization having responsibility for compliance;

g. the procedures (including use of contract penalties) Jordan Cove and Pacific Connector will follow if noncompliance occurs; and

h. for each discrete facility, a Gantt or PERT chart (or similar Project scheduling diagram), and dates for:

1. the completion of all required surveys and reports;

2. the environmental compliance training of onsite personnel;

3. the start of construction; and

4. the start and completion of restoration.

8. Jordan Cove shall employ at least one EI for the LNG terminal and Pacific Connector shall employ a team of EIs for the pipeline facilities (i.e., at least one per construction spread or as may be established by the Director of OEP). The EIs shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or authorizing documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 7 above) and any other authorizing document;

c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;

d. a full-time position separate from all other activity inspectors;

e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and

f. responsible for maintaining status reports.

9. Beginning with the filing of its Implementation Plan, Jordan Cove shall file updated status reports with the Secretary on a **monthly** basis for the LNG terminal and Pacific Connector shall file updated status reports with the Secretary on a **biweekly** basis for the pipeline facilities until all construction and restoration activities are complete. Problems of a significant magnitude shall be reported to the Federal Energy Regulatory Commission (FERC or Commission) **within 24**

**hours.** On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

a. an update on Jordan Cove's and Pacific Connector's efforts to obtain the necessary federal authorizations;

b. Project schedule, including current construction status of the LNG terminal/each pipeline spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally-sensitive areas;

c. a listing of all problems encountered, contractor nonconformance/deficiency logs, and each instance of noncompliance observed by the EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

d. a description of the corrective and remedial actions implemented in response to all instances of noncompliance, nonconformance, or deficiency;

e. the effectiveness of all corrective and remedial actions implemented;

f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the order, and the measures taken to satisfy their concerns; and

g. copies of any correspondence received by Jordan Cove and Pacific Connector from other federal, state, or local permitting agencies concerning instances of noncompliance, and Jordan Cove's and Pacific Connector's response.

10. Pacific Connector shall develop and implement an environmental complaint resolution procedure, and file such procedure with the Secretary, for review and approval by the Director of OEP. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Project and restoration of the right-of-way. This procedure shall be in effect throughout the construction and restoration periods and two years thereafter. Prior to construction, Pacific Connector shall mail the complaint procedures to each landowner whose property will be crossed by the Project.

a. In its letter to affected landowners, Pacific Connector shall:

1. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;

2. instruct the landowners that if they are not satisfied with the response, they should call Pacific Connector's Hotline; the letter should indicate how soon to expect a response; and

3. instruct the landowners that if they are still not satisfied with the response from Pacific Connector's Hotline, they should contact the Commission's Landowner Helpline at 877-337-2237 or at LandownerHelp@ferc.gov.

b. In addition, Pacific Connector shall include in its bi-weekly status report a copy of a table that contains the following information for each problem/concern:

1. the identity of the caller and date of the call;

2. the location by milepost and identification number from the authorized alignment sheet(s) of the affected property;

3. a description of the problem/concern; and

4. an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

11. Jordan Cove and Pacific Connector must receive written authorization from the Director of OEP before commencing construction of any Project facilities, including any tree-felling or ground-disturbing activities. To obtain such authorization, Jordan Cove must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof). Pacific Connector will not be granted authorization to commence construction of any of its Project facilities until 1) Jordan Cove has filed documentation that it has received all applicable authorizations required under federal law for construction of its terminal facilities (or evidence of waiver thereof) and 2) Pacific Connector has filed documentation that it has received all applicable authorizations required under federal law for construction of its pipeline facilities (or evidence of waiver thereof).

12. Jordan Cove must receive written authorization from the Director of OEP **prior to introducing hazardous fluids into the Project facilities**. Instrumentation and controls, hazard detection, hazard control, and security components/systems necessary for the safe introduction of such fluids shall be installed and functional.

13. Jordan Cove must receive written authorization from the Director of OEP **before placing into service** the LNG terminal and other components of the Jordan Cove LNG Project. Such authorization will only be granted following a determination that the facilities have been constructed in accordance with the FERC approval, can be expected to operate safely as designed, and the rehabilitation and restoration of the areas affected by the Project are proceeding satisfactorily.

14. Pacific Connector must receive written authorization from the Director of OEP **before placing the pipeline into service.** Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Pacific Connector Gas Pipeline Project are proceeding satisfactorily.

15. **Within 30 days of placing the authorized facilities in service**, Jordan Cove and Pacific Connector shall each file an affirmative statement with the Secretary, certified by a senior company official:

    a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or

    b. identifying which of the conditions of the Order Jordan Cove and Pacific Connector have complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

16. **Prior to construction,** Pacific Connector shall file with the Secretary, for review and written approval by the Director of OEP, revised alignment sheets that incorporate the Blue Ridge Variation into its proposed route between mileposts (MPs) 11 and 25. (*section 3.4.2.2*)

17. **Prior to construction,** Pacific Connector shall file an updated landslide identification study with the Secretary, for review and written approval by the Director of the OEP, that includes:

a. results of a review of any available Oregon Department of Geology and Mineral Industries (DOGAMI) landslide studies that were not previously used for landslide identification;

b. results of a review of the latest available DOGAMI Light Detection and Ranging (LiDAR) data for identification of landslides along the entire pipeline route;

    c. specific mitigation that will be implemented for any previously unidentified moderate or high-risk landslide areas of concern; and

    d. the final monitoring protocols and/or mitigation measures for all landslide areas that were not accessible during previous studies. (*section 4.1.2.4*)

18. **Prior to construction,** Pacific Connector shall file with the Secretary, for review and written approval by the Director of OEP, a listing of all drilling fluid additives, grout, and lost circulation material (LCM) that may be used during horizontal directional drill (HDD) activities, provide safety data sheets for these materials, and indicate the ecotoxicity of each additive mixed in the drilling fluid

to the identified toxicity for relevant biotic receptors. *(section 4.3.2.2)*

19. **Prior to construction,** Pacific Connector shall file with the Secretary a revised *Integrated Pest Management Plan*, for review and written approval by the Director of the OEP, that specifies that construction equipment will be cleaned after leaving areas of noxious weed infestations and pathogens and prior to entering United States Department of Interior Bureau of Land Management (BLM)-managed lands regardless of contiguous land owner. The revised plan shall also address BLM and United States Department of Agriculture Forest Service (Forest Service) requirements related to monitoring of invasive plant species and pathogens on federally managed lands, and documentation that the revised plan was found acceptable by the BLM and Forest Service. (*section 4.4.3.4*)

20. **Prior to construction,** Jordan Cove shall file with the Secretary, for review and written approval by the Director of OEP, its lighting plan. The plan shall include measures that will reduce lighting to the minimal levels necessary to ensure safe operation of the LNG facilities and any other measures that will be implemented to minimize lighting impacts on fish and wildlife. Along with its lighting plan, Jordan Cove shall file documentation that the plan was developed in consultation with the United States Fish and Wildlife Service (FWS), National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS), and Oregon Department of Fish and Wildlife (ODFW). This lighting plan shall also be in compliance with condition 53. (*section 4.5.1.1)*

21. **Prior to construction,** Pacific Connector shall file with the Secretary documentation that the final *Fish Salvage Plan* was developed in consultation with interested tribes, ODFW, FWS, and NMFS. (*section 4.5.2.3*)

22. **Prior to construction**, Pacific Connector shall file with the Secretary, for review and written approval by the Director of OEP, a revised *Hydrostatic Test Plan* that requires that any water withdrawal from a flowing stream does not exceed an instantaneous flow reduction of more than 10 percent of stream flow. (*section 4.5.2.3*)

23. **Prior to construction**, Jordan Cove shall file with the Secretary, for review and written approval by the Director of OEP, a *Marine Mammal Monitoring Plan* that identifies how the presence of listed whales will be determined during construction, and measures Jordan Cove will take to reduce potential noise effects on whales and other marine mammals, and ensure compliance with NMFS underwater noise criteria for the protection of listed whales. *(section 4.6.1.1)*

24. **Prior to construction,** Pacific Connector shall file with the Secretary its commitment to adhere to FWS-recommended timing restrictions within threshold distances of marbled murrelet (MAMU) and northern spotted owl (NSO) stands

**during construction, operations, and maintenance** of the pipeline facilities. *(section 4.6.1.2)*

25. **Prior to construction,** Pacific Connector shall conduct standard protocol surveys of all suitable MAMU and NSO habitat that might be affected by the Project unless an alternate approach is approved by the FWS. Furthermore, Pacific Connector shall file with the Secretary the results of these surveys and documentation of its consultation with the FWS regarding the survey methods. *(section 4.6.1.2)*

26. Jordan Cove and Pacific Connector shall implement the reasonable and prudent measures and adopt the terms and conditions set forth for listed species in the Incidental Take Statements provided by NMFS and FWS on January 10 and January 31, 2020, respectively.

27. Jordan Cove and Pacific Connector **shall not begin construction** of the Project **until** they file with the Secretary a copy of the determination of consistency with the Coastal Zone Management Plan issued by the State of Oregon. (*section 4.7.1.2*)

28. **Prior to construction,** Jordan Cove and Pacific Connector shall file with the Secretary a statement affirming the designation of a Construction Housing Coordinator who will coordinate with contractors and the community to address housing concerns. Additionally, Jordan Cove and Pacific Connector shall describe the measures it will implement to inform affected communities about the Construction Housing Coordinator. *(section 4.9.2.2)*

29. **Prior to construction**, Jordan Cove shall file documentation that it has entered into a cooperative improvement agreement with the Oregon Department of Transportation (ODOT) and traffic development agreements with Coos County and the City of North Bend, as recommended in the *Traffic Impact Analysis report*. *(section 4.10.1.2)*

30. Jordan Cove and Pacific Connector shall **not begin construction of facilities and/or use** any staging, storage, or temporary work areas and new or to-be-improved access roads **until**:

    a. Jordan Cove and Pacific Connector each has filed with the Secretary:

        1. remaining cultural resources inventory reports for areas not previously surveyed;

        2. site evaluations and monitoring reports, as necessary;

        3. a revised Ethnographic Study Report that addresses the items outlined in staff's May 4 and October 23, 2018 environmental

information requests;

4. final Historic Properties Management Plans (HPMPs) for both Projects with avoidance plans;

5. final Unanticipated Discovery Plan (UDP); and

6. comments on the cultural resources reports, studies, and plans from the State Historic Preservation Officer (SHPO), applicable federal land managing agencies, and interested Indian tribes.

b. the Advisory Council on Historic Preservation (ACHP) is afforded an opportunity to comment on the undertaking; and

c. FERC staff reviews and the Director of OEP approves all cultural resources reports, studies, and plans, and notifies Jordan Cove and Pacific Connector in writing that treatment plans may be implemented and/or construction may proceed.

All materials filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "Controlled Unclassified Information (**CUI)//Privileged (PRIV) - DO NOT RELEASE**." *(section 4.11.5*)

31. **During construction of the LNG terminal facilities and other activities requiring the use of vibratory and impact pile-driving**, Jordan Cove shall:

a. limit all active pile driving to between the hours of 7:00 a.m. and 10:00 p.m.; and

b. utilize wooden pile cushion/caps when conducting impact pile-driving work. (*section 4.12.2.3*)

32. Jordan Cove shall file a full power load noise survey with the Secretary **no later than 60 days after placing the entire LNG terminal into service**. If a full load noise survey is not possible, Jordan Cove shall file an interim survey at the maximum possible horsepower load **within 60 days** of placing the LNG terminal into service and file the full operational surveys **within 6 months**. If the noise attributable to the operation of all the equipment of the LNG terminal exceeds 55 decibels on the A-weighted scale, day-night equivalent (dBA $L_{dn}$) at any nearby noise sensitive areas (NSAs), under interim or full load conditions, Jordan Cove shall file a report on what changes are needed and install additional noise controls to meet the level **within 1 year** of the in-service date. Jordan Cove shall confirm compliance with this requirement by filing a second full power noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls. *(section 4.12.2.3)*

33. **Prior to drilling activities at HDD sites,** Pacific Connector shall file a site-

specific noise mitigation plan with the Secretary, for review and written approval by the Director of OEP. During any drilling operations, Pacific Connector shall implement the approved plan, monitor noise levels, and file in its biweekly reports documentation that the noise levels attributable to the drilling operations at NSAs does not exceed 55 $L_{dn}$ dBA. (*section 4.12.2.4*)

34. 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 $L_{dn}$ 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 Secretary **no later than 60 days** after it installs the additional noise controls. *(section 4.12.2.4)*

35. **Prior to initial site preparation**, Jordan Cove shall file with the Secretary documentation of consultation with the United States Department of Transportation Pipeline and Hazardous Materials Safety Administration (USDOT PHMSA) that the final design safety features demonstrates compliance with 49 Code of Federal Regulations (CFR) §193.2051 and National Fire Protection Association (NFPA) 59A 2.1.1(d). *(section 4.13.1.6)*

36. **Prior to construction of final design,** Jordan Cove shall file with the Secretary documentation of consultation with USDOT PHMSA staff as to whether the use of normally closed valves to remove stormwater from curbed areas will meet USDOT PHMSA requirements. *(section 4.13.1.6)*

37. **Prior to construction of final design**, Jordan Cove shall file with the Secretary the following information, stamped and sealed by the professional engineer-of-record, registered in Oregon:

    a. site preparation drawings and specifications;

    b. LNG terminal structures, LNG storage tank, and foundation design drawings and calculations (including prefabricated and field constructed structures);

    c. seismic specifications for procured Seismic Category I equipment prior to the issuing of request for quotations;

    d. quality control procedures to be used for civil/structural design and

construction; and

e. a determination of whether soil improvement is necessary to counteract soil liquefaction.

In addition, Jordan Cove shall file, in its Implementation Plan, the schedule for producing this information. *(section 4.13.1.6)*

38. Jordan Cove shall employ a special inspector during construction of the LNG Terminal facilities and a copy of the inspection reports **shall be included in the monthly status reports** filed with the Secretary. The special inspector shall be responsible for:

a. observing the construction of the LNG terminal to be certain it conforms to the design drawings and specifications;

b. furnishing inspection reports to the engineer- or architect-of-record, and other designated persons. All discrepancies shall be brought to the immediate attention of the contractor for correction, then if uncorrected, to the engineer- or architect-of-record; and

c. submitting a final signed report stating whether the work requiring special inspection was, to the best of his/her knowledge, in conformance with approved plans and specifications and the applicable workmanship provisions. (section 4.13.1.6)

39. **Prior to receiving LNG carriers**, Jordan Cove shall file with the Secretary an affirmative statement indicating that a Letter of Agreement has been signed and executed with the Southwest Oregon Regional Airport as stipulated by the U.S. Department of Transportation Federal Aviation Administration's (FAA's) determination for temporary structures.

40. **Prior to commencement of service**, Jordan Cove shall file with the Secretary a monitoring and maintenance plan, stamped and sealed by the professional engineer-of-record registered in Oregon, which ensures the facilities are protected for the life of the LNG terminal considering settlement, subsidence, and sea level rise. *(section 4.13.1.6)*

**Conditions 40 through 128 shall apply to the Jordan Cove LNG terminal. Information pertaining to these specific conditions shall be filed with the Secretary for review and written approval by the Director of OEP either: prior to initial site preparation; prior to construction of final design; prior to commissioning; prior to introduction of hazardous fluids; or prior to commencement of service, as indicated by each specific condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 683 (Docket No. RM06-24-000), including security information, shall be submitted as critical energy infrastructure information (CEII) pursuant to 18 CFR §388.112. See CEII, Order**

**No. 683, 71 Fed. Reg. 58,273 (October 3, 2006), FERC Stats. & Regs. ¶ 31,228 (2006). Information pertaining to items such as offsite emergency response; procedures for public notification and evacuation; and construction and operating reporting requirements will be subject to public disclosure. All information shall be filed a minimum of 30 days before approval to proceed is required.**

41. **Prior to initial site preparation**, Jordan Cove shall file an overall Project schedule, which includes the proposed stages of the commissioning plan. *(section 4.13.1.6)*

42. **Prior to initial site preparation**, Jordan Cove shall file procedures for controlling access during construction. *(section 4.13.1.6)*

43. **Prior to initial site preparation**, Jordan Cove shall file quality assurance and quality control procedures for construction activities. *(section 4.13.1.6)*

44. **Prior to initial site preparation,** Jordan Cove shall file its design wind speed criteria for all other facilities not covered by USDOT PHMSA's Letter of Determination to be designed to withstand wind speeds commensurate with the risk and reliability associated with the facilities in accordance with ASCE 7-16 or equivalent. *(section 4.13.1.6)*

45. **Prior to initial site preparation**, Jordan Cove shall specify a spill containment system around the Warm Flare Knockout Drum. *(section 4.13.1.6)*

46. **Prior to initial site preparation**, Jordan Cove shall develop an Emergency Response Plan (ERP) (including evacuation) and coordinate procedures with the Coast Guard; state, county, and local emergency planning groups; fire departments; state and local law enforcement; and appropriate federal agencies. This plan shall include at a minimum:

    a. designated contacts with state and local emergency response agencies;

    b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;

    c. procedures for notifying residents and recreational users within areas of potential hazard;

    d. evacuation routes/methods for residents and public use areas that are within any transient hazard areas along the route of the LNG marine transit;

    e. locations of permanent sirens and other warning devices; and

    f. an "emergency coordinator" on each LNG marine vessel to activate sirens and other warning devices.

Jordan Cove shall notify the FERC staff of all planning meetings in advance and shall report progress on the development of its ERP **at 3- month intervals**. *(section 4.13.1.6)*

47. **Prior to initial site preparation**, Jordan Cove shall file a Cost-Sharing Plan identifying the mechanisms for funding all Project-specific security/emergency management costs that will be imposed on state and local agencies. This comprehensive plan shall include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. Jordan Cove shall notify FERC staff of all planning meetings in advance and shall report progress on the development of its Cost Sharing Plan at **3-month intervals**. *(section 4.13.1.6)*

48. **Prior to construction of final design**, Jordan Cove shall file change logs that list and explain any changes made from the Front End Engineering Design (FEED) provided in Jordan Cove LNG Project's application and filings. A list of all changes with an explanation for the design alteration shall be provided and all changes shall be clearly indicated on all diagrams and drawings. The storage tank design shall reflect the updated elevations referenced in the FAA's permanent structure aeronautical studies. *(section 4.13.1.6)*

49. **Prior to construction of final design**, Jordan Cove shall file information/revisions pertaining to Jordan Cove's response numbers 8c, 13, 15, 21, 22, 23, 24, 26, 27, 28, and 31 of its December 20, 2018 filing and 6, 9, 10, 11, 17, 19, 32, 34, and 36 of its February 6, 2019 filing which indicated features to be included or considered in the final design. *(section 4.13.1.6)*

50. **Prior to construction of final design**, Jordan Cove shall file drawings and specifications for crash rated vehicle barriers at each facility entrance for access control. *(section 4.13.1.6)*

51. **Prior to construction of final design**, Jordan Cove shall file drawings of the security fence. The fencing drawings shall provide details of fencing that demonstrates it will restrict and deter access around the entire facility and has a setback from exterior features (e.g., power lines, trees, etc.) and from interior features (e.g., piping, equipment, buildings, etc.) that does not allow the fence to be overcome. *(section 4.13.1.6)*

52. **Prior to construction of final design**, Jordan Cove shall file drawings of internal road vehicle protections, such as guard rails, barriers, and bollards to protect transfer piping, pumps, compressors, hydrants, monitors, etc. to ensure that they are located away from roadway or protected from inadvertent damage from vehicles. *(section 4.13.1.6)*

53. **Prior to construction of final design**, Jordan Cove shall file security camera and intrusion detection drawings. The security camera drawings shall show the locations, areas covered, and features of each camera (e.g., fixed, tilt/pan/zoom, motion detection alerts, low light, mounting height, etc.) to verify camera coverage of the entire perimeter with redundancies for cameras interior to the facility to enable rapid monitoring of the facility, including a camera at the top of each LNG storage tank, and coverage within pretreatment areas, within liquefaction areas, within truck transfer areas, within marine transfer areas, and buildings. The drawings shall show or note the location of the intrusion detection to verify it covers the entire perimeter of the facility. *(section 4.13.1.6)*

54. **Prior to construction of final design**, Jordan Cove shall file lighting drawings. The lighting drawings shall show the location, elevation, type of light fixture, and lux levels of the lighting system and shall be in accordance with American Petroleum Institute (API) 540 and provide illumination along the perimeter of the facility, process equipment, mooring points, and along paths/roads of access and egress to facilitate security monitoring and emergency response operations. This lighting plan shall also be in compliance with condition 20. *(section 4.13.1.6)*

55. **Prior to construction of final design**, Jordan Cove shall file a plot plan of the final design showing all major equipment, structures, buildings, and impoundment systems. *(section 4.13.1.6)*

56. **Prior to construction of final design**, Jordan Cove shall file three-dimensional plant drawings to confirm plant layout for maintenance, access, egress, and congestion. *(section 4.13.1.6)*

57. **Prior to construction of final design**, Jordan Cove shall file up-to-date process flow diagrams (PFDs) and piping and instrument diagrams (P&IDs) including vendor P&IDs. The PFDs shall include heat and material balances. The P&IDs shall include the following information:

    a. equipment tag number, name, size, duty, capacity, and design conditions;

    b. equipment insulation type and thickness;

    c. storage tank pipe penetration size and nozzle schedule;

    d. valve high pressure side and internal and external vent locations;

    e. piping with line number, piping class specification, size, and insulation type and thickness;

    f. piping specification breaks and insulation limits;

    g. all control and manual valves numbered;

    h. relief valves with size and set points; and

i. drawing revision number and date. *(section 4.13.1.6)*

58. **Prior to construction of final design**, Jordan Cove shall file P&IDs, specifications, and procedures that clearly show and specify the tie-in details required to safely connect subsequently constructed facilities with the operational facilities. *(section 4.13.1.6)*

59. **Prior to construction of final design**, Jordan Cove shall file a car seal philosophy and a list of all car-sealed and locked valves consistent with the P&IDs. *(section 4.13.1.6)*

60. **Prior to construction of final design**, Jordan Cove shall file information to demonstrate the Engineering, Procurement, and Construction (EPC) contractor has verified that all FEED Hazard and Operability Study (HAZOP) and Layers of Protection Analysis (LOPA) recommendations have been addressed. *(section 4.13.1.6)*

61. **Prior to construction of final design**, Jordan Cove shall file a hazard and operability review, including a list of recommendations and actions taken on the recommendations, prior to issuing the P&IDs for construction. *(section 4.13.1.6)*

62. **Prior to construction of final design**, Jordan Cove shall provide a check valve upstream of the amine contractor column to prevent backflow or provide a dynamic simulation that shows that upon plant shutdown, the swan neck will be sufficient for this purpose. *(section 4.13.1.6)*

63. **Prior to construction of final design**, Jordan Cove shall specify how Mole Sieve Gas Dehydrator support and sieve material will be prevented from migrating to the piping system. *(section 4.13.1.6)*

64. **Prior to construction of final design**, Jordan Cove shall specify how the regeneration gas heater tube design temperature will be consistent with the higher shell side steam temperatures. *(section 4.13.1.6)*

65. **Prior to construction of final design**, Jordan Cove shall specify a cold gas bypass around the defrost gas heater to prevent defrost gas heater high temperature shutdown during low flow and startup conditions. *(section 4.13.1.6)*

66. **Prior to construction of final design**, Jordan Cove shall demonstrate that the differential pressure (dp) level transmitters on the LNG flash drum will not result in an excess number of false high-high-high level shutdowns. *(section 4.13.1.6)*

67. **Prior to construction of final design**, Jordan Cove shall specify a means to stop LNG flows to the boiloff gas (BOG) suction drum when the BOG compressor is shutdown to prevent filling the BOG suction drum with LNG. *(section 4.13.1.6)*

68. **Prior to construction of final design**, Jordan Cove shall specify a low instrument air pressure shutdown to prevent loss of control to air operated valves. *(section 4.13.1.6)*

69. **Prior to construction of final design**, Jordan Cove shall evaluate and, if applicable, address the potential for cryogenic feed gas back flow in the event relief valve 30-PSV-01002A/B is open. *(section 4.13.1.6)*

70. **Prior to construction of final design**, Jordan Cove shall include LNG tank fill flow measurement with high flow alarm. *(section 4.13.1.6)*

71. **Prior to construction of final design**, Jordan Cove shall specify a discretionary vent valve on each LNG storage tank that is operable through the Distributed Control System (DCS). In addition, a car sealed open manual block valve shall be provided upstream of the discretionary vent valve. *(section 4.13.1.6)*

72. **Prior to construction of final design**, Jordan Cove shall file the safe operating limits (upper and lower), alarm and shutdown set points for all instrumentation (e.g., temperature, pressures, flows, and compositions). *(section 4.13.1.6)*

73. **Prior to construction of final design**, Jordan Cove shall file cause-and-effect matrices for the process instrumentation, fire and gas detection system, and emergency shutdown system. The cause-and-effect matrices shall include alarms and shutdown functions, details of the voting and shutdown logic, and set points. *(section 4.13.1.6)*

74. **Prior to construction of final design**, Jordan Cove shall file an up-to-date equipment list, process and mechanical data sheets, and specifications. The specifications shall include:

    a. building specifications (e.g., control buildings, electrical buildings, compressor buildings, storage buildings, pressurized buildings, ventilated buildings, blast resistant buildings);

    b. mechanical specifications (e.g., piping, valve, insulation, rotating equipment, heat exchanger, storage tank and vessel, other specialized equipment);

    c. electrical and instrumentation specifications (e.g., power system, control system, safety instrument system [SIS], cable specifications, other electrical and instrumentation); and

    d. security and fire safety specifications (e.g., security, passive protection, hazard detection, hazard control, firewater). *(section 4.13.1.6)*

75. **Prior to construction of final design**, Jordan Cove shall file a list of all codes and standards and the final specification document number where they are referenced. *(section 4.13.1.6)*

76. **Prior to construction of final design**, Jordan Cove shall file complete specifications and drawings of the proposed LNG tank design and installation. *(section 4.13.1.6)*

77. **Prior to construction of final design**, Jordan Cove shall file an evaluation of emergency shutdown valve closure times. The evaluation shall account for the time to detect an upset or hazardous condition, notify plant personnel, and close the emergency shutdown valve(s). *(section 4.13.1.6)*

78. **Prior to construction of final design**, Jordan Cove shall file an evaluation of dynamic pressure surge effects from valve opening and closure times and pump operations that demonstrate that the surge effects do not exceed the design pressures. *(section 4.13.1.6)*

79. **Prior to construction of final design**, Jordan Cove shall demonstrate that, for hazardous fluids, piping and piping nipples 2 inches or less in diameter are designed to withstand external loads, including vibrational loads in the vicinity of rotating equipment and operator live loads in areas accessible by operators. *(section 4.13.1.6)*

80. **Prior to construction of final design**, Jordan Cove shall clearly specify the responsibilities of the LNG tank contractor and the EPC contractor for the piping associated with the LNG storage tank. *(section 4.13.1.6)*

81. **Prior to construction of final design**, Jordan Cove shall file the sizing basis and capacity for the final design of the flares and/or vent stacks as well as the pressure and vacuum relief valves for major process equipment, vessels, and storage tanks. *(section 4.13.1.6)*

82. **Prior to construction of final design**, Jordan Cove shall file an updated fire protection evaluation of the proposed facilities. A copy of the evaluation, a list of recommendations and supporting justifications, and actions taken on the recommendations shall be filed. The evaluation shall justify the type, quantity, and location of hazard detection and hazard control, passive fire protection, emergency shutdown and depressurizing systems, firewater, and emergency response equipment, training, and qualifications in accordance with NFPA 59A (2001). The justification for the flammable and combustible gas detection and flame and heat detection systems shall be in accordance with International Systems of America (ISA) 84.00.07 or equivalent methodologies and would need to demonstrate 90 percent or more of releases (unignited and ignited) that could

result in an off-site or cascading impact would be detected by two or more detectors and result in isolation and de inventory within 10 minutes. The analysis shall take into account the set points, voting logic, wind speeds, and wind directions. The justification for firewater shall provide calculations for all firewater demands based on design densities, surface area, and throw distance as well as specifications for the corresponding hydrant and monitors needed to reach and cool equipment. *(section 4.13.1.6)*

83. **Prior to construction of final design**, Jordan Cove shall file spill containment system drawings with dimensions and slopes of curbing, trenches, impoundments, and capacity calculations considering any foundations and equipment within impoundments, as well as the sizing and design of the down-comers. The spill containment drawings shall show containment for all hazardous fluids including all liquids handled above their flashpoint, from the largest flow from a single line for 10 minutes, including de-inventory, or the maximum liquid from the largest vessel (or total of impounded vessels) or otherwise demonstrate that providing spill containment would not significantly reduce the flammable vapor dispersion or radiant heat consequences of a spill. *(section 4.13.1.6)*

84. **Prior to construction of final design,** Jordan Cove shall file an analysis that demonstrates the flammable vapor dispersion from design spills will be prevented from dispersing underneath the elevated LNG storage tanks, or the LNG storage tanks will be able to withstand an overpressure due to ignition of the flammable vapor that disperses underneath the elevated LNG storage tanks.

85. **Prior to construction of final design**, Jordan Cove shall file electrical area classification drawings. *(section 4.13.1.6)*

86. **Prior to construction of final design**, Jordan Cove shall provide documentation demonstrating adequate ventilation, detection, and electrical area classification based on the final selection of the batteries, and associated hydrogen off-gassing rates. *(section 4.13.1.6)*

87. **Prior to construction of final design**, Jordan Cove shall file drawings and details of how process seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system meet the requirements of NFPA 59A (2001). *(section 4.13.1.6)*

88. **Prior to construction of final design**, Jordan Cove shall file details of an air gap or vent installed downstream of process seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection device that shall continuously monitor for the presence of a flammable fluid, alarm

the hazardous condition, and shut down the appropriate systems. *(section 4.13.1.6)*

89. **Prior to construction of final design**, Jordan Cove shall file complete drawings and a list of the hazard detection equipment. The drawings shall clearly show the location and elevation of all detection equipment. The list shall include the instrument tag number, type and location, alarm indication locations, and shutdown functions of the hazard detection equipment. *(section 4.13.1.6)*

90. **Prior to construction of final design**, Jordan Cove shall file a technical review of facility design that:

    a. identifies all combustion/ventilation air intake equipment and the distances to any possible flammable gas or toxic release; and

    b. demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion or heating ventilation and air conditioning equipment whose continued operation could add to or sustain an emergency. *(section 4.13.1.6)*

91. **Prior to construction of final design**, Jordan Cove shall file a design that includes hazard detection suitable to detect high temperatures and smoldering combustion products in electrical buildings and control room buildings. *(section 4.13.1.6)*

92. **Prior to construction of final design**, Jordan Cove shall file an evaluation of the voting logic and voting degradation for hazard detectors. *(section 4.13.1.6)*

93. **Prior to construction of final design**, Jordan Cove shall file a list of alarm and shutdown set points for all hazard detectors that account for the calibration gas of the hazard detectors when determining the lower flammable limit set points for methane, ethylene, propane, isopentane, and condensate. *(section 4.13.1.6)*

94. **Prior to construction of final design**, Jordan Cove shall file a list of alarm and shutdown set points for all hazard detectors that account for the calibration gas of hazard detectors when determining the set points for toxic components such as condensate and hydrogen sulfide. *(section 4.13.1.6)*

95. **Prior to construction of final design**, Jordan Cove shall file a drawing showing the location of the emergency shutdown buttons. Emergency shutdown buttons shall be easily accessible, conspicuously labeled, and located in an area which will be accessible during an emergency. *(section 4.13.1.6)*

96. **Prior to construction of final design**, Jordan Cove shall file facility plan drawings and a list of the fixed and wheeled dry-chemical, hand-held fire

extinguishers, and other hazard control equipment. Plan drawings shall clearly show the location by tag number of all fixed, wheeled, and hand-held extinguishers and shall demonstrate the spacing of extinguishers meet prescribed NFPA 10 travel distances. The list shall include the equipment tag number, type, capacity, equipment covered, discharge rate, and automatic and manual remote signals initiating discharge of the units and shall demonstrate they meet NFPA 59A. *(section 4.13.1.6)*

97. **Prior to construction of final design**, Jordan Cove shall file drawings and specifications for the structural passive protection systems to protect equipment and supports from cryogenic releases. *(section 4.13.1.6)*

98. **Prior to construction of final design**, Jordan Cove shall file calculations or test results for the structural passive protection systems to protect equipment and supports from cryogenic releases. *(section 4.13.1.6)*

99. **Prior to construction of final design**, Jordan Cove shall file drawings and specifications for the structural passive protection systems to protect equipment and supports from pool and jet fires. *(section 4.13.1.6)*

100. **Prior to construction of final design**, Jordan Cove shall file a detailed quantitative analysis to demonstrate that adequate mitigation will be provided for each significant component within the 4,000 British thermal units per hour square foot (Btu/ft$^2$-hr) zone from pool and jet fires that could cause failure of the component. Trucks at the truck transfer station shall be included in the analysis. A combination of passive and active protection for pool fires and passive and/or active protection for jet fires shall be provided and demonstrate the effectiveness and reliability. Effectiveness of passive mitigation shall be supported by calculations or test results for the thickness limiting temperature rise and effectiveness of active mitigation shall be justified with calculations or test results demonstrating flow rates and durations of any cooling water would mitigate the heat absorbed by the vessel. *(section 4.13.1.6)*

101. **Prior to construction of final design**, Jordan Cove shall file an evaluation and associated specifications and drawings of how it would prevent cascading damage of transformers (e.g., fire walls or spacing) in accordance with NFPA 850 or equivalent. *(section 4.13.1.6)*

102. **Prior to construction of final design**, Jordan Cove shall file facility plan drawings showing the proposed location of the firewater and any foam systems. Plan drawings shall clearly show the location of firewater and foam piping, post indicator valves, and the location and area covered by, each monitor, hydrant, hose, water curtain, deluge system, foam system, water-mist system, and sprinkler. All areas of the pretreatment area shall have adequate coverage. The drawings

shall also include piping and instrumentation diagrams of the firewater and foam systems. *(section 4.13.1.6)*

103. **Prior to construction of final design**, Jordan Cove shall specify that the firewater pump shelter is designed to allow removal of the largest firewater pump or other component for maintenance with an overhead or external crane. *(section 4.13.1.6)*

104. **Prior to construction of final design**, Jordan Cove shall demonstrate that the firewater storage tanks are in compliance with NFPA 22 or demonstrate how API Standard 650 provides an equivalent or better level of safety. *(section 4.13.1.6)*

105. **Prior to construction of final design**, Jordan Cove shall specify that the firewater flow test meter is equipped with a transmitter and that a pressure transmitter is installed upstream of the flow transmitter. The flow transmitter and pressure transmitter shall be connected to the distributed control system (DCS) and recorded. *(section 4.13.1.6)*

106. **Prior to construction of final design**, Jordan Cove shall file drawings of the storage tank piping support structure and support of horizontal piping at grade including pump columns, relief valves, pipe penetrations, instrumentation, and appurtenances. *(section 4.13.1.6)*

107. **Prior to construction of final design**, Jordan Cove shall file the structural analysis of the LNG storage tank and outer containment demonstrating they are designed to withstand all loads and combinations. *(section 4.13.1.6)*

108. **Prior to construction of final design**, Jordan Cove shall file an analysis of the structural integrity of the outer containment of the full containment LNG storage tank demonstrating it can withstand the radiant heat from a roof tank top fire or adjacent tank roof fire. *(section 4.13.1.6)*

109. **Prior to construction of final design**, Jordan Cove shall file a projectile analysis to demonstrate that the outer concrete impoundment wall of a full-containment LNG storage tank could withstand projectiles from explosions and high winds. The analysis shall detail the projectile speeds and characteristics and method used to determine penetration or perforation depths. *(section 4.13.1.6)*

110. **Prior to commissioning**, Jordan Cove shall file a detailed schedule for commissioning through equipment startup. The schedule shall include milestones for all procedures and tests to be completed: prior to introduction of hazardous fluids and during commissioning and startup. Jordan Cove shall file documentation certifying that each of these milestones has been completed before authorization to commence the next phase of commissioning and startup will be issued. *(section 4.13.1.6)*

111. **Prior to commissioning**, Jordan Cove shall file detailed plans and procedures for: testing the integrity of onsite mechanical installation; functional tests; introduction of hazardous fluids; operational tests; and placing the equipment into service. *(section 4.13.1.6)*

112. **Prior to commissioning**, Jordan Cove shall file settlement results from the hydrostatic tests of the LNG storage containers and shall file a plan to periodically verify settlement is as expected and does not exceed the applicable criteria set forth in API 620, API 625, API 653, and ACI 376. The plan shall also specify what actions will be taken after various levels of seismic events. *(section 4.13.1.6)*

113. **Prior to commissioning**, Jordan Cove shall file the operation and maintenance procedures and manuals, as well as safety procedures, hot work procedures and permits, abnormal operating conditions reporting procedures, simultaneous operations procedures, and management of change procedures and forms. *(section 4.13.1.6)*

114. **Prior to commissioning**, Jordan Cove shall file a plan for clean-out, dry-out, purging, and tightness testing. This plan shall address the requirements of the American Gas Association's Purging Principles and Practice, and shall provide justification if not using an inert or non-flammable gas for clean-out, dry-out, purging, and tightness testing. *(section 4.13.1.6)*

115. **Prior to commissioning**, Jordan Cove shall tag all equipment, instrumentation, and valves in the field, including drain valves, vent valves, main valves, and car-sealed or locked valves. *(section 4.13.1.6)*

116. **Prior to commissioning**, Jordan Cove shall file a plan describing how it will maintain a detailed training log to demonstrate that operating, maintenance, and emergency response staff have completed the required training. *(section 4.13.1.6)*

117. **Prior to commissioning**, Jordan Cove shall file the procedures for pressure/leak tests which address the requirements of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) Section VIII and ASME B31.3. In addition, Jordan Cove shall file a line list of pneumatic and hydrostatic test pressures. *(section 4.13.1.6)*

118. **Prior to introduction of hazardous fluids**, Jordan Cove shall complete and document a pre-startup safety review to ensure that installed equipment meets the design and operating intent of the facility. The pre-startup safety review shall include any changes since the last hazard review, operating procedures, and operator training. A copy of the review with a list of recommendations, and actions taken on each recommendation, shall be filed. *(section 4.13.1.6)*

119. **Prior to introduction of hazardous fluids**, Jordan Cove shall complete and document all pertinent tests (Factory Acceptance Tests, Site Acceptance Tests, Site Integration Tests) associated with the DCS and SIS that demonstrates full functionality and operability of the system. *(section 4.13.1.6)*

120. **Prior to introduction of hazardous fluids**, Jordan Cove shall develop and implement an alarm management program to reduce alarm complacency and maximize the effectiveness of operator response to alarms. *(section 4.13.1.6)*

121. **Prior to introduction of hazardous fluids**, Jordan Cove shall complete and document clean agent acceptance tests. *(section 4.13.1.6)*

122. **Prior to introduction of hazardous fluids**, Jordan Cove shall complete and document a firewater pump acceptance test and firewater monitor and hydrant coverage test. The actual coverage area from each monitor and hydrant shall be shown on facility plot plan(s). *(section 4.13.1.6)*

123. **Prior to introduction of hazardous fluids**, Jordan Cove shall complete and document foam system and sprinkler system acceptance tests. *(section 4.13.1.6)*

124. Jordan Cove shall file a request for written authorization from the Director of OEP **prior to unloading or loading the first LNG commissioning cargo**. After production of first LNG, Jordan Cove shall file weekly reports on the commissioning of the proposed systems that detail the progress toward demonstrating the facilities can safely and reliably operate at or near the design production rate. The reports shall include a summary of activities, problems encountered, and remedial actions taken. The weekly reports shall also include the latest commissioning schedule, including projected and actual LNG production by each liquefaction train, LNG storage inventories in each storage tank, and the number of anticipated and actual LNG commissioning cargoes, along with the associated volumes loaded or unloaded. Further, the weekly reports shall include a status and list of all planned and completed safety and reliability tests, work authorizations, and punch list items. Problems of significant magnitude shall be reported to the FERC within 24 hours. *(section 4.13.1.6)*

125. **Prior to commencement of service**, Jordan Cove shall file a request for written authorization from the Director of OEP. Such authorization will only be granted following a determination by the Coast Guard, under its authorities under the Ports and Waterways Safety Act, the Magnuson Act, the Maritime Transportation Security Act of 2002, and the Security and Accountability For Every Port Act, that appropriate measures to ensure the safety and security of the facility and the waterway have been put into place by Jordan Cove or other appropriate parties. *(section 4.13.1.6)*

126. **Prior to commencement of service**, Jordan Cove shall notify the FERC staff of any proposed revisions to the security plan and physical security of the plant. *(section 4.13.1.6)*

127. **Prior to commencement of service**, Jordan Cove shall label piping with fluid service and direction of flow in the field, in addition to the pipe labeling requirements of NFPA 59A (2001). *(section 4.13.1.6)*

128. **Prior to commencement of service**, Jordan Cove shall provide plans for any preventative and predictive maintenance program that performs periodic or continuous equipment condition monitoring. *(section 4.13.1.6)*

129. **Prior to commencement of service**, Jordan Cove shall develop procedures for offsite contractors' responsibilities, restrictions, and limitations and for supervision of these contractors by Jordan Cove staff. *(section 4.13.1.6)*

**In addition, conditions 129 through 132 shall apply throughout the life of the Jordan Cove LNG Project**.

130. The facility shall be subject to regular FERC staff technical reviews and site inspections on at least an **annual** basis or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, Jordan Cove shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed P&IDs reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted semi-annual report, shall be submitted. *(section 4.13.1.6)*

131. **Semi-annual** operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions; abnormal operating experiences; activities (e.g., ship arrivals, quantity and composition of imported and exported LNG, liquefied and vaporized quantities, boil off/flash gas); and plant modifications, including future plans and progress thereof. Abnormalities shall include, but not be limited to, unloading/loading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tank, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, hazardous fluids releases, fires involving hazardous fluids and/or from other sources, negative pressure (vacuum) within a storage tank, and higher than predicted boil off rates. Adverse weather conditions and the

effect on the facility also shall be reported. Reports shall be submitted **within 45 days after each period ending June 30 and December 31**. In addition to the above items, a section entitled "Significant Plant Modifications Proposed for the Next 12 Months (dates)" shall be included in the semi-annual operational reports. Such information would provide the FERC staff with early notice of anticipated future construction/maintenance at the LNG facilities. *(section 4.13.1.6)*

132. In the event the temperature of any region of the LNG storage container, including any secondary containment and imbedded pipe supports, becomes less than the minimum specified operating temperature for the material, the Commission shall be notified **within 24 hours** and procedures for corrective action shall be specified. *(section 4.13.1.6)*

133. Significant non-scheduled events, including safety-related incidents (e.g., LNG, condensate, refrigerant, or natural gas releases; fires; explosions; mechanical failures; unusual over pressurization; and major injuries) and security-related incidents (e.g., attempts to enter site, suspicious activities) shall be reported to the FERC staff. In the event that an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made **immediately**, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification shall be made to the FERC staff **within 24 hours**. This notification practice shall be incorporated into the liquefaction facility's emergency plan. Examples of reportable hazardous fluids-related incidents include:

    a. fire;

    b. explosion;

    c. estimated property damage of $50,000 or more;

    d. death or personal injury necessitating in-patient hospitalization;

    e. release of hazardous fluids for 5 minutes or more;

    f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes hazardous fluids;

    g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes hazardous fluids;

    h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes hazardous fluids to rise above its maximum allowable operating pressure (or working pressure for LNG

facilities) plus the build-up allowed for operation of pressure-limiting or control devices;

i. a leak in an LNG facility that contains or processes hazardous fluids that constitutes an emergency;

j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;

k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes hazardous fluids;

l. safety-related incidents from hazardous fluids transportation occurring at or en route to and from the LNG facility; or

m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property, or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, the FERC staff would determine the need for a separate follow-up report or follow up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a reoccurrence of the incident. *(section 4.13.1.6)*

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Jordan Cove Energy Project L.P. | Docket Nos. | CP17-495-000 |
| Pacific Connector Gas Pipeline, LP | | CP17-494-000 |

(Issued March 19, 2020)

GLICK, Commissioner, *dissenting*:

1. I dissent from today's order because it violates both the Natural Gas Act[1] (NGA) and the National Environmental Policy Act[2] (NEPA). Rather than wrestling with the Project's[3] 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 once again refuses to consider the consequences its actions have for climate change. Although neither the NGA nor NEPA permit the Commission to assume away the impact that constructing and operating the LNG Terminal and Pipeline will have on climate change, that is precisely what the Commission is doing here. In today's order authorizing the Project, pursuant to both section 3 and section 7 of the NGA, 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

[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 authorizes the construction and operation of the Jordan Cove LNG export terminal (LNG Terminal) pursuant to NGA section 3, 15 U.S.C. § 717b (2018), and the new Pacific Connector interstate natural gas pipeline (Pipeline) pursuant to NGA section 7, *id.* § 717f. I will refer to those projects collectively as the Project.

[4] The Commission previously denied Pacific Connector Gas Pipeline, L.P. an NGA section 7 certificate because it did not show that the Pipeline was needed and, at the same time, denied Jordan Cove an NGA section 3 certificate because it had no natural gas supply without the Pacific Connector pipeline. *See Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,190 (2016).

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 "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 does not adequately wrestle with the Project's adverse impacts. The Project will significantly and adversely affect several threatened and endangered species, historic properties, and the supply of short-term housing in the vicinity of the project. It will also cause elevated noise levels during construction and impair 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.

## I. The Commission's Public Interest Determinations Are Not the Product of Reasoned Decisionmaking

4. 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.[8] 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

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[5] *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202, at P 259 (2020) (Certificate Order); Final Environmental Impact Statement at Tables 4.12.1.3-1, 4.12.1.3-2, 4.12.1.4-1 & 4.12.1.4-2 (EIS).

[6] 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] Certificate Order, 170 FERC ¶ 61,202 at P 294.

[8] *Sierra Club v. FERC*, 827 F.3d 36, 40 (D.C. Cir. 2016) (*Freeport*).

consistent with the public interest."[9] 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.

5. 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."[10] The Commission evaluates whether "an application for the siting, construction, expansion, or operation of an LNG terminal" is itself consistent with the public interest.[11] Pursuant to that authority, the Commission must approve a proposed LNG facility unless the record shows that the facility would be inconsistent with the public interest.[12] Today's order fails to satisfy that standard in multiple respects.

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[9] 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).

[10] 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.

[11] 15 U.S.C. § 717b(e). In 1977, Congress transferred the regulatory functions of 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.

[12] *See Freeport*, 827 F.3d at 40-41.

### A. The Commission's Public Interest Determination Does Not Adequately Consider Climate Change

6. 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.[13] 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.[14] 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 concludes that all of the Project's environmental impacts would be "acceptable."[15] Think about that. The Commission is simultaneously stating that it cannot assess the significance of the Project's impact on climate change[16] while concluding that all environmental impacts are acceptable to the public interest.[17] That is unreasoned and an abdication of our responsibility to give climate change the "hard look" that the law demands.[18]

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[13] *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. 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").

[14] Certificate Order, 170 FERC ¶ 61,202 at P 262; EIS at 4-4-850.

[15] Certificate Order, 170 FERC ¶ 61,202 at P 294.

[16] *Id.* P 262; EIS at 4-4-850 ("[W]e are unable to determine the significance of the Project's contribution to climate change.").

[17] 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.)

[18] *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

7. 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.

8. 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.[19] 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"[20] and that the "GHG emissions from the construction and operation of the projects will contribute incrementally to climate change."[21] 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.

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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").

[19] 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).

[20] EIS at 4-849.

[21] Certificate Order, 170 FERC ¶ 61,202 at P 262.

### B. The Commission's Consideration of the Project's Other Adverse Impacts Is Also Arbitrary and Capricious

9. In addition, the Project is expected to have a significant adverse effect on threatened and endangered species, including whale, fish, and bird species,[22] historic properties along the pipeline route,[23] and short-term housing in Coos County.[24] Indeed, the Project will adversely affect more than 20 different Federally-listed threatened or endangered species.[25] It will also cause harmful noise levels in the area[26] and impair the visual character of the surrounding community.[27] Although the Commission discloses the adverse impacts throughout the EIS and mentions them in today's order,[28] it does not appear that they meaningfully factor into the Commission's public interest analysis.

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[22] *Id.* PP 220-223.

[23] *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].").

[24] Certificate Order, 170 FERC ¶ 61,202 at PP 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).

[25] Certificate Order, 170 FERC ¶ 61,202 at PP 222-223. Furthermore, the Commission asserts that it would authorize the Project to proceed on the basis of its adverse impact on threatened and endangered species only if that impact would jeopardize the continued existence of the specific. EIS at 4-378. As a logical matter, if the Commission will not consider denying a certificate unless it causes the relevant species to extinct, then any sub-extinction level adverse impacts cannot meaningfully factor into the Commission's public interest determination.

[26] EIS at 4-717– 4-721. The Commission finds that pile driving associated with LNG Terminal construction occurring 20 hours per day for two years would result in a significant impact on the local community.

[27] Certificate Order, 170 FERC ¶ 61,202 at P 237.

[28] *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

10. The Commission notes that the Project may provide various benefits, such as jobs and economic stimulus for the region, and weighs those benefits against adverse economic interests.[29] I certainly recognize that public benefits should be considered in the public interest determination. But reasoned decisionmaking requires that the Commission do more than simply point to the benefits of the Project and assert that the Project satisfies the relevant public interest standard, especially where, as here, the Project will also have considerable adverse impacts. Instead, the Commission must weigh the Project's benefits and all adverse impacts, including those on the environment, if it is to reach a reasoned decision.[30]

11. The Sierra Club's protest makes this very point, contending that environmental impacts "must be incorporated into the balancing . . . of the public interest."[31] In response, the Commission asserts its "balancing of adverse impacts and public benefits is not an environmental analysis process, but rather an economic test."[32] Given that statement, and the absence of any effort in today's order to explain why the Project satisfies the relevant public interest standards despite the significant environmental impacts,[33] the only rational conclusion is that those substantial environmental impacts do not meaningfully factor into the Commission's application of the public interest. The courts, however, have been clear that the Commission must consider "all factors bearing on the public interest."[34] Accordingly, the Commission's refusal to consider

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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).

[29] *Id.* P 94 (concluding that "benefits the Pacific Connector Pipeline will provide outweigh the adverse effects on economic interests.").

[30] 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.

[31] Sierra Club's October 26, 2017 Protest at 6.

[32] Certificate Order, 170 FERC ¶ 61,202 at P 92.

[33] Although today's order identifies several significant adverse environmental impacts, the Commission concludes that these environmental impacts are "acceptable considering the public benefits" without any explanation of how the benefits outweigh the substantial adverse impacts. *See id.* P 294.

[34] *See Sabal Trail*, 867 F.3d at 1373 (explaining that the Commission may "deny a

environmental impacts as part of its public interest analysis is inconsistent with the NGA and arbitrary and capricious.

## II. The Commission Fails to Satisfy Its Obligations under NEPA

12. The Commission's NEPA analysis of the Project's GHG emissions is similarly flawed. 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."[35] As noted, the operation of the Project will emit more than 2 million tons of GHG emissions per year.[36] 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.[37] As an initial matter, 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

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pipeline certificate on the ground that the pipeline would be too harmful to the environment"); *see also Atl. Ref. Co.*, 360 U.S. at 391 (holding that the NGA requires the Commission to consider "all factors bearing on the public interest").

[35] *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").

[36] 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).

[37] *See Ctr. for Biological Diversity*, 538 F.3d at 1216 ("While the [environmental document] quantifies the expected amount of $CO_2$ 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.").

be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision."[38] It is 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.

13. In addition, under NEPA, a finding of significance informs the Commission's inquiry into potential ways of mitigating environmental impacts.[39] An environmental review document must "contain a detailed discussion of possible mitigation measures" to address adverse environmental impacts.[40] "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.[41]

14. 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.[42] 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

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[38] *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)).

[39] 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.").

[40] *Robertson*, 490 U.S. at 351.

[41] *Id.* at 352.

[42] 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.").

sets a standard for its climate analysis that is higher than it requires for any other environmental impact.

15. Indeed, the record in this proceeding provides exactly the type of methodology that the Commission has previously suggested would permit it to make a significance determination. Throughout the course of the last year, the Commission has justified its refusal to consider the significance of a project's GHG emissions on the basis that it could not "find any GHG emission reduction goals established either at the federal level or by the [state]."[43] As the Commission explained in discussing the LNG export facility it most recently approved: "Without either the ability to determine discrete resource impacts or an established target to compare GHG emissions against, we are unable to determine the significance of the Project's contribution to climate change."[44]

16. But Oregon has an "established target to compare GHG emissions against." The State has a legislative goal of reducing GHG emissions 10 percent below 1990 levels by 2020 and 75 percent below 1990 levels by 2050.[45] That is exactly the type of goal that the Commission has previously suggested would provide a framework for establishing significance. Today's order recognizes the state's reduction goals and acknowledges that the Project's GHG emissions would "represent 4.2 percent and 15.3 percent of Oregon's 2020 and 2050 GHG goals, respectively"[46]—*i.e.*, the Project alone would account for almost an eighth of the total state-wide emissions permissible under Oregon law in 2050.

17. But today's order then moves the goal posts once again. Notwithstanding its previous statements that a federal or state climate goal could provide a benchmark to evaluate GHG emissions, the Commission now takes the position that those benchmarks are insufficient because they are not "objective."[47] The Commission, however, provides

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[43] *See, e.g.*, Certificate Order, 170 FERC ¶ 61,202 at P 262 (citing *Rio Grande LNG, LLC*, 170 FERC ¶ 61,046 (2020)). The Commission's order in *Rio Grande* adopted the conclusion that 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 target to compare GHG emissions against, we are unable to determine the significance of the Project's contribution to climate change." Final Environmental Impact Statement, Docket No. CP16-454-000, at 4-482 (Apr. 26, 2019).

[44] Final Environmental Impact Statement, Docket No. CP16-454-000 at 5-22.

[45] *See* Certificate Order, 170 FERC ¶ 61,202 at P 260.

[46] *Id.* P 261.

[47] *Id.* P 262.

no justification for its change of heart or its newest excuse for ignoring the significance of the Project's contribution to climate change. As I have previously explained, simply adding the word "objective" does not provide a reasoned basis for refusing to assess significance.[48]

18. It is clear what is going on. The Commission is at pains to avoid having to say that a project's GHG emissions or the impact of those emissions on climate change is significant. After all, it is only when it comes to climate change (and, as noted, only now) that the Commission claims to need an "objective" measure to evaluate significance. The Commission often relies on percentage comparisons when assessing the significance of other environmental impacts. It is only when it comes to climate change that the Commission suddenly gets cold feet about using percentages to determine significance and demands the type of "objective" standard that it does not require anywhere else.

19. In any case, even without a formal tool or methodology, the Commission can consider all factors and determine, quantitatively or qualitatively, whether the Project's 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.[49] The Commission's refusal to similarly analyze the Project's impact on climate change is arbitrary and capricious.

20. And even if the Commission were to determine 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.[50] 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."[51]

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[48] *Rio Grande LNG, LLC*, 170 FERC ¶ 61,046 (Glick, Comm'r, dissenting at P 22).

[49] *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).

[50] *Robertson*, 490 U.S. at 351.

[51] *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

21. 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.[52] And throughout today's order, the Commissions uses its broad conditioning authority under section 3 and section 7 of the NGA[53] to implement these mitigation measures, which support its public interest finding.[54] For 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.[55] 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.[56]

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measures).

[52] *See, e.g.*, EIS at 4-656 (discussing mitigation required by the Commission to address motor vehicle traffic impacts from the Project).

[53] 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.").

[54] *See* Certificate Order, 170 FERC ¶ 61,202 at P 293 (explaining that the environmental conditions ensure that the Project's environmental impacts are consistent with those anticipated by the environmental analysis).

[55] *Id.* P 279.

[56] Commissioner McNamee implies that, as part of a mitigation mechanism, I want the Commission to consider imposing a carbon tax or a cap-and-trade like system. Certificate Order, 170 FERC ¶ 61,202 (McNamee, Comm'r, concurring at P 59). That is a red herring. To my knowledge, no one has suggested that the Commission can impose a carbon tax or something similar under NGA section 3. My point is that the Commission could consider discrete measures that offset the adverse effects of the Project itself, just like it does for a host of other adverse environmental impacts. For example, the project developer could purchase renewable energy credits equal to the Project's electricity consumption or it could plant trees sufficient to sequester the Project's GHG emissions. Tailored programs that offset the actual emissions from the

22. 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."[57] NEPA "'merely prohibits uninformed—rather than unwise—agency action.'"[58] 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.

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Richard Glick
Commissioner

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Project are a far cry from a comprehensive emissions-trading scheme and have much in common with other forms of mitigation routinely required by the Commission, including the mitigation contained in this order.

[57] *Sierra Club v. U.S. Army Corps of Engineers*, 803 F.3d 31, 37 (D.C. Cir. 2015).

[58] *Id.* (quoting *Robertson*, 490 U.S. at 351).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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| Jordan Cove Energy Project L.P. | Docket Nos. | CP17-495-000 |
| Pacific Connector Gas Pipeline, LP | | CP17-494-000 |

(Issued March 19, 2020)

McNAMEE, Commissioner, *concurring*:

1. Today's order authorizes Jordan Cove Energy Project L.P. (Jordan Cove) to site, construct, and operate a new liquefied natural gas (LNG) export terminal (Jordan Cove LNG Terminal) in Coos County, Oregon, and issues Pacific Connector Gas Pipeline, LP (Pacific Connector) a certificate of public convenience and necessity to construct and operate its proposed Pacific Connector Pipeline in Klamath, Jackson, Douglas, and Coos Counties, Oregon (together, the Project).[1]

2. These NGA authorizations are two of many federal permits that the applicants must receive to begin construction, including a Clean Water Act section 401 water quality certification and a Coastal Zone Management Act federal consistency determination. Although Congress enacted the NGA, Clean Water Act, and Coastal Zone Management Act using its Commerce Clause power, each have separate statutory requirements and constructs that provide for a unique balance between Congress' constitutional authority to regulate interstate commerce with the States' authority to preserve their own interests.

3. Congress enacted the Clean Water Act to protect national water quality. To balance national and State interests, Congress required the Administrator of the U.S. Environmental Protection Agency (EPA) to establish national standards and preserved certain roles for States, including the ability to set water quality standards for discharges that are more stringent than federal requirements.

4. Congress enacted the Coastal Zone Management Act to preserve, protect, develop, and restore national coastlines and delegated authority to the federal government, state governments, and local governments. Among other authorities, Congress provided States "with a limited opportunity to review applications to ensure they are consistent with state regulations, and, in doing so, grant[ed] states 'a conditional veto over federally licensed or permitted projects.'"[2] Congress, however, made that veto subject to review by the Secretary of Commerce who may overturn a State's decision if the Secretary finds that

[1] *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 (2020).

[2] *Weaver's Cove Energy, LLC v. Rhode Island Coastal Res. Mgmt. Council*, 589 F.3d 458, 462 (1st Cir. 2009) (internal citations omitted).

"the activity is consistent with the objectives of [the Act] or is otherwise necessary in the interest of national security."[3]

5. As for the NGA, and as I discuss further below, Congress enacted the Act to provide access to natural gas and to direct the Commission to fill in the regulatory void left open by the courts and the Dormant Commerce Clause.[4] Unlike the Clean Water Act or the Coastal Zone Management Act, Congress did not articulate in the NGA a federal-state partnership to regulate the sale and transportation of natural gas in foreign and interstate commerce. Rather, Congress gave the Commission exclusive authority to regulate such transactions and preserved State authority to regulate the local distribution of natural gas, natural gas production, and natural gas gathering. Furthermore, Congress preserved to the States various authorities under the Coastal Zone Management Act, Clean Air Act, and Clean Water Act.[5] Thus, today's authorizations in no way negate Oregon Department of Environmental Quality's (Oregon DEQ) denial without prejudice of the applicants' Clean Water Act section 401 water quality certification application or Oregon Department of Land Conservation and Development's (Oregon DLCD) objection to the federal consistency determination. Indeed, the Commission's conditional authorizations do not permit the applicants to begin construction until they show evidence of obtaining the other federal authorizations or waiver thereof.[6]

6. However, Oregon DEQ and Oregon DLCD's determinations do not control the Commission's NGA sections 3 and 7 authorizations for the Project. NGA section 3 requires the Commission to authorize the siting, construction, and operation of an export or import facility unless the facility is not consistent with the public interest.[7] NGA

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[3] 16 U.S.C. § 1456(c)(3)(A) (2018).

[4] *See also Weaver's Cove Energy, LLC*, 589 F.3d at 461 ("The NGA was originally passed in the 1930s to facilitate the growth of the energy-transportation industry . . . .").

[5] 15 U.S.C. § 717(b); *id.* § 717b(d); *Panhandle E. Pipe Line Co. v. Pub. Serv. Comm'n of Ind.*, 332 U.S. 507, 520 (1947) ("The Natural Gas Act created an articulate legislative program based on a clear recognition of the respective responsibilities of the federal and state regulatory agencies. It does not contemplate ineffective regulation at either level. We have emphasized repeatedly that Congress meant to create a comprehensive and effective regulatory scheme, complementary in its operation to those of the states and in no manner usurping their authority.").

[6] *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 at Environmental Conditions 11 and 27.

[7] 15 U.S.C. § 717b(a) (2018); *see also West Virginia Pub. Serv. Comm'n v. U.S. Dep't of Energy*, 681 F.2d 847, 856 ("[S]ection 3 sets out a general presumption favoring such authorization, by language which requires approval of an application unless there is

section 7 requires the Commission to issue a certificate of public convenience and necessity for the construction and operation of interstate natural gas pipeline facilities when the Commission finds those facilities are required by the present or future public convenience and necessity.[8] By placing the authority to make these determinations with the Commission, Congress requires the Commission to consider national interests.[9]

7. While States' interests may inform the Commission's determinations, at times, the national interest may conflict with a State's interest; in those cases, the Commission may find that the national interest outweighs the State's interest. The Commission exercises its authority under the NGA, which Congress enacted pursuant to its power under the Commerce Clause. The Commerce Clause emerged as the Founders' response to the ruinous effects resulting from state regulation, tariffs, and protectionism occurring under the Articles of Confederation and giving rise to the Constitution itself.[10] In Federalist No. 42, Publius explained the necessity of the Constitution and the Commerce Clause, stating "[t]he defect of power in the existing Confederacy to regulate the commerce between its several members [has] been clearly pointed out by experience."[11] Similarly,

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an express finding that the proposed activity would not be consistent with the public interest.").

[8] 15 U.S.C. § 717f(e) (2018).

[9] *Kansas v. Fed. Power Comm'n*, 206 F. 690, 705 (8th Cir. 1953) (". . . . Congress has vested the power in the Federal Commission to regulate in the national interest the charges natural gas companies may make for the gas they sell in interstate commerce for resale . . . ."); *Kern River Gas Transmission Co. v. Clark Cnty, Nev.*, 747 F. Supp. 1110 (Dec. 3, 1990) ("The very fact that Congress saw fit to provide a statutory scheme for authorizing 'Certificates of Public Convenience and Necessity' through the FERC pursuant to the Natural Gas Act indicates that there are substantial national interests at stake.").

[10] *Nat'l Fed'n of Indep. Bus. v. Sebelius,* 567 U.S. 519, 599-600 (2012) ("The Commerce Clause, it is widely acknowledged, 'was the Framer's response to the central problem that gave rise to the Constitution itself.' Under the Articles of Confederation, the Constitution's precursor, the regulation of commerce was left to the States. This scheme proved unworkable, because the individual States, understandably focused on their own economic interests, often failed to take actions critical to the success of the Nation as a whole."); *Gonzalez v. Raich*, 545 U.S. 1, 16 (2005) ("The Commerce Clause emerged as the Framers' response to the central problem giving rise to the Constitution itself: the absence of any federal commerce power under the Articles of Confederation.").

[11] James Madison, *The Federalist No. 42 in The Federalist Papers,* 267 (C. Rossiter ed. 1961).

Congress recognized this tension when amending the NGA to provide certificate holders eminent domain authority.[12]

8. Considering the constitutional structure of our government, the NGA and other acts of Congress, as well as the facts in this case, I agree with today's order that the LNG Terminal is not inconsistent with the public interest and the pipeline is required by the public convenience and necessity.[13] These determinations, consistent with the NGA, are based on the national interest, but with serious and heavy consideration of the potential impacts of the Project on affected local communities, States, and environmental resources. I also agree that today's order complies with the National Environmental Policy Act (NEPA). After taking the necessary hard look at the Project's impacts on environmental and socioeconomic resources, the order finds that the Project's environmental impacts are acceptable considering the public benefits that will be provided by the Project.[14] Further, the Commission quantified and considered greenhouse gas (GHG) emissions that are directly associated with the construction and operation of the Project,[15] consistent with the holding in *Sierra Club v. FERC* (*Sabal Trail*).[16]

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[12] *Thatcher v. Tennessee Gas Transmission Co.*, 180 F.2d 644, 647 (5th Cir. 1950) ("Implicit in the provisions of the statute are the facts, among others, that vast reserves of natural gas are located in States of our nation distant from other States which have no similar supply, but do have a vital need of the product; and that the only way this natural gas can be feasibly transported from one State to another is by means of a pipe line. None of the means of transportation by water, land or air, to which mankind has successively become accustomed, suffices for the movement of natural gas. Consideration of the facts, and the legislative history, plan and scope of the Natural Gas Act, and the judicial consideration and application the Act has received, leaves us in no doubt that the grant by Congress of the power of eminent domain to a natural gas company, within the terms of the Act, and which in all of its operations is subject to the conditions and restrictions of the statute, is clearly within the constitutional power of Congress to regulate interstate Commerce.").

[13] *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 at PP 296-97.

[14] *Id.* P 294.

[15] *Id.* PP 258-62; Environmental Impact Statement (EIS) at 4-701, 4-704, and 4-706.

[16] 867 F.3d 1357 (D.C. Cir. 2017). This case is commonly referred to as "Sabal Trail" because the Sabal Trail Pipeline is one of the three pipelines making up the Southeast Market Pipelines Project.

9. Although I fully support this order, I also write separately to address what I perceive to be a misinterpretation of the Commission's authority under the NGA and NEPA. There have been contentions that the NGA authorizes the Commission to deny a certificate application based on the environmental effects that result from upstream gas production,[17] that the NGA authorizes the Commission to establish measures to mitigate GHG emissions, and that the Commission violates the NGA and NEPA by not determining whether GHG emissions significantly affect the environment. I disagree.

10. A close examination of the statutory text and foundation of the NGA demonstrates that the Commission does not have the authority under the NGA or NEPA to deny a pipeline certificate application based on the environmental effects of upstream gas production, nor does the Commission have the authority to unilaterally establish measures to mitigate GHGs emitted by LNG or pipeline facilities. Further, the Commission has no objective basis to determine whether GHG emitted by LNG or pipeline facilities will have a significant effect on climate change nor the authority to establish its own basis for making such a determination.

11. It is my intention that my discussion of the statutory text and foundation will assist the Commission, the courts, and other parties in their arguments regarding the meaning of the "public convenience and necessity" and the Commission's consideration of a project's effect on climate change in NGA section 3 and 7 proceedings. Further, my review of appellate briefs filed with the court and the Commission's orders suggests that the court may not have been presented with the arguments I make here. Before I offer my arguments, it is important that I further expound on the current debate.

## I. Current debate

12. When acting on a NGA section 3 permit or NGA section 7 certificate application, the Commission has two primary statutory obligations under the NGA and NEPA. The NGA requires the Commission to determine whether proposed NGA section 3 facilities "will not be consistent with the public interest"[18] and whether proposed NGA section 7

[17] Parties previously raised this argument for NGA section 3 applications. The courts, however, have found that the Commission cannot act on information related to the natural gas commodity in considering NGA section 3 permits. *See EarthReports, Inc. v. FERC*, 828 F.3d 949 (D.C. Cir. 2016) (holding that the Commission reasonably declined to consider upstream domestic natural gas production as an indirect effect of the project); *Sierra Club v. FERC*, 827 F.3d 36, 47 (D.C. Cir. 2016) ("[T]he Commission's NEPA analysis did not have to address the indirect effects of the anticipated *export* of natural gas.").

[18] 15 U.S.C. § 717b(a) (2018).

facilities are required by the "present or future public convenience and necessity."[19] NEPA, and the Council on Environmental Quality's (CEQ) implementing regulations, require that the Commission take a "hard look" at the direct,[20] indirect,[21] and cumulative[22] effects of a project. Recently, there has been much debate concerning what factors the Commission can consider in determining whether a NGA section 7 proposed project is in the "public convenience and necessity," and whether the effects related to upstream natural gas production are indirect effects of a certificate application as defined by NEPA.[23]

13. Equating NGA section 7's "public convenience and necessity" standard with a "public interest" standard, my colleague has argued that NGA section 7 requires the Commission to weigh GHGs emitted from the project facilities and related to upstream natural gas production.[24] In support of his contention, my colleague has cited the holding in *Sabal Trail* and dicta in *Atlantic Refining Co. v. Public Service Commission of State of New York* (*CATCO*).[25] In both NGA section 3 and 7 proceedings, my colleague has argued that the Commission must determine whether GHG emissions have a significant impact on climate change in order for climate change to "play a meaningful role in the

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[19] *Id.* § 717f(e).

[20] Direct effects are those "which are caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a) (2019).

[21] Indirect effects are those "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b) (2019). The U.S. Supreme Court held that NEPA requires an indirect effect to have "a reasonably close causal relationship" with the alleged cause; "a 'but for' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA and the relevant regulations." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004).

[22] Cumulative effects are those "which result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7 (2019).

[23] As noted in footnote 17, this issue has been settled by the courts for NGA section 3 applications. *See supra* note 17.

[24] *Cheyenne Connector, LLC*, 168 FERC ¶ 61,180, at P 10 (2019) (Glick, Comm'r, dissenting) (Cheyenne Connector Dissent).

[25] *Id.* P 4 n.7 (citing *CATCO*, 360 U.S. 378, 391 (1959)). The case *Atlantic Refining Co. v. Public Service Commission of State of New York* is commonly known as "*CATCO*" because the petitioners were sometimes identified by that name.

Commission's public interest determination."[26] And he has argued that by not determining the significance of those emissions, the "public interest determination [] systematically excludes the most important environmental consideration of our time" and "is contrary to law, arbitrary and capricious" and is not "the product of reasoned decisionmaking."[27]

14. He has asserted that the Commission could use the Social Cost of Carbon or its own expertise to determine whether GHG emissions will have a significant effect on climate change.[28] Further, he has contended that the Commission could mitigate any GHG emissions in the event that it made a finding that the GHG emissions had a significant impact on climate change.[29]

15. Several recent cases before the United States Court of Appeals for the D.C. Circuit have also considered the Commission's obligations under NGA section 7 and NEPA as they apply to what environmental effects the Commission is required to consider under NEPA.[30] In *Sabal Trail*, the D.C. Circuit vacated and remanded the Commission's order issuing a certificate for the Southeast Market Pipelines Project, finding that the Commission inadequately assessed GHGs emitted from downstream power plants in its EIS for the project.[31] The court held that the downstream GHG emissions resulting from burning the natural gas at the power plants were a reasonably foreseeable indirect effect of authorizing the project and, at a minimum, the Commission should have estimated those emissions.

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[26] Cheyenne Connector Dissent P 6.

[27] *Id.*

[28] *Id.* PP 13-14.

[29] *Id.* P 16.

[30] The courts have not explicitly opined on whether the Commission is required to determine whether GHG emissions will have a significant impact on climate change or whether the Commission must mitigate GHG emissions. The D.C. Circuit, however, has suggested that the Commission is not required to determine whether GHG emissions are significant. *Appalachian Voices v. FERC*, 2019 WL 847199, *2 (D.C. Cir. Feb. 19, 2019) (unpublished) ("FERC provided an estimate of the upper bound of emissions resulting from end-use combustion, and it gave several reasons why it believed petitioner's preferred metric, the Social Cost of Carbon, 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.").

[31] *Sabal Trail*, 867 F.3d 1357.

16. Further, the *Sabal Trail* court found the Commission's authorization of the project was the legally relevant cause of the GHGs emitted from the downstream power plants "because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment."[32] The court stated the Commission could do so because, when considering whether pipeline applications are in the public convenience and necessity, "FERC will balance 'the public benefits against the adverse effects of the project,' *see Minisink Residents for Envtl. Pres. & Safety v. FERC*, 762 F.3d 97, 101-02 (D.C. Cir. 2014) (internal quotation marks omitted), including adverse environmental effects, *see Myersville Citizens for a Rural Cmty. v. FERC*, 783 F.3d 1301, 1309 (D.C. Cir. 2015)."[33] Relying on its finding that the Commission could deny a pipeline on environmental grounds, the court distinguished *Sabal Trail* from the Supreme Court's holding in *Public Citizen*, where the Court held "when the agency has no *legal* power to prevent a certain environmental effect, there is no decision to inform, and the agency need not analyze the effect in its NEPA review"[34] and the D.C. Circuit's decision in *Sierra Club v. FERC* (*Freeport*), where it held "that FERC had *no legal authority to prevent* the adverse environmental effects of natural gas exports."[35]

17. Based on these findings, the court concluded that "greenhouse-gas emissions are an indirect effect of authorizing this project, which FERC could reasonably foresee, and which the agency has legal authority to mitigate."[36] The court also held "the EIS for the Southeast Market Pipelines Project should have either given a quantitative estimate of the downstream greenhouse emissions . . . or explained more specifically why it could not have done so."[37] The court impressed that "[it did] not hold that quantification of greenhouse-gas emissions is required *every* time those emissions are an indirect effect of an agency action" and recognized that "in some cases quantification may not be feasible."[38]

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[32] *Id.* at 1373.

[33] *Id.*

[34] *Sabal Trail*, 867 F.3d at 1372 (citing *Pub. Citizen*, 541 U.S. at 770) (emphasis in original).

[35] *Id.* at 1373 (citing *Freeport*, 827 F.3d 36, 47 (D.C. Cir. 2016)) (emphasis in original).

[36] *Id.* at 1374 (citing 15 U.S.C. § 717f(e)).

[37] *Id.*

[38] *Id.* (emphasis in original).

18. More recently, in *Birckhead v. FERC*,[39] the D.C. Circuit commented in dicta on the Commission's authority to consider downstream emissions. The court stated that because the Commission could "'deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is the legally relevant cause of the direct and indirect environmental effects of pipelines it approves'—even where it lacks jurisdiction over the producer or distributor of the gas transported by the pipeline."[40] The court also examined whether the Commission was required to consider environmental effects related to upstream gas production, stating it was "left with no basis for concluding that the Commission acted arbitrarily or capriciously or otherwise violated NEPA in declining to consider the environmental impacts of upstream gas production."[41]

19. I respect the holding of the court in *Sabal Trail* and the discussion in *Birckhead*, and I recognize that the *Sabal Trail* holding is binding on the Commission. However, I respectfully disagree with the court's finding that the Commission can, pursuant to the NGA, deny a pipeline based on environmental effects stemming from the production and use of natural gas, and that the Commission is therefore required to consider such environmental effects under the NGA and NEPA.[42]

20. The U.S. Supreme Court has observed that NEPA requires an indirect effect to have "a reasonably close causal relationship" with the alleged cause.[43] Whether there is a reasonably close causal relationship depends on "the underlying policies or legislative intent" of the agency's organic statute "to draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not."[44] Below, I review the text of the NGA and subsequent acts by Congress to demonstrate that the "public convenience and necessity" standard in the NGA is not so broad as to include environmental effects of upstream natural gas production, and that the Commission cannot be responsible for those effects. I focus on upstream gas production, and not

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[39] 925 F.3d 510 (D.C. Cir. 2019).

[40] *Id.* at 519 (citing *Sabal Trail*, 867 F.3d at 1373) (internal quotations omitted).

[41] *Id.* at 518.

[42] Though the D.C. Circuit's holding in *Sabal Trail* is binding on the Commission, it is not appropriate to expand that holding through the dicta in *Birckhead* so as to establish new authorities under the NGA and NEPA. The Commission is still bound by the NGA and NEPA as enacted by Congress, and interpreted by the U.S. Supreme Court and the D.C. Circuit. Our obligation is to read the statutes and case law in harmony. This concurrence articulates the legal reasoning by which to do so.

[43] *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 (1983)

[44] *Id.* at 774 n.7.

downstream use, because the Pacific Connector will be transporting gas to the LNG Terminal and the Commission has quantified and considered the GHGs emitted by the terminal facilities. Further, the Commission is not required to consider effects related to the commodity for NGA section 3 applications.[45]

21. As for GHGs emitted from LNG or pipeline facilities themselves, I believe that the Commission can consider such emissions in its NGA determination and is required to consider them in its NEPA analysis. As I set forth below, however, the Commission cannot unilaterally establish measures to mitigate GHG emissions, and there currently is no suitable method for the Commission to determine whether GHG emissions are significant.

## II. The NGA does not permit the Commission to deny a certificate application based on environmental effects related to upstream natural gas production

22. To interpret the meaning of "public convenience and necessity," we must begin with the text of the NGA.[46] I recognize that the Commission[47] and the courts have equated the "public convenience and necessity" standard with "all factors bearing on the public interest."[48] However, the phrase "all factors bearing on the public interest" does

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[45] *See supra* note 17. The analysis presented here regarding the Commission's limitations to consider GHG emissions for upstream production is generally applicable to downstream use, as well. Because the issue of downstream GHG emissions involving an LNG export facility is not at issue in this proceeding and has been resolved by the courts, it is not discussed in this concurrence. For a full discussion of this issue see my concurrence in *Adelphia*. *Adelphia Gateway, LLC*, 169 FERC ¶ 61,220 (2019) (McNamee, Comm'r, concurring).

[46] 15 U.S.C. § 717f(e) (2018). *See infra* PP 48-54. It is noteworthy that the phrase "public interest" is not included in NGA section 7(c)(1)(A) (requiring pipelines to have a certificate) or NGA section 7(e) (requiring the Commission to issue certificates). Rather, these provisions use the phrase "public convenience and necessity." NGA section 7(c)(1)(B) does refer to public interest when discussing how the Commission can issue a temporary certificate in cases of emergency. *Id.* § 717f(c)(1)(B). Congress is "presumed to have used no superfluous words." *Platt v. Union Pac. R.R. Co.*, 99 U.S. 48, 58 (1878); *see also U.S. ex rel. Totten v. Bombardier Corp.*, 380 F.3d 488, 499 (D.C. Cir. 2004) ("It is, of course, a 'cardinal principle of statutory construction that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant.'" (citing *Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, n.13 (2004))).

[47] *See, e.g., North Carolina Gas Corp.*, 10 FPC 469, 475 (1950).

[48] *CATCO*, 360 U.S. at 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

not mean that the Commission has "broad license to promote the general public welfare"[49] or address greater societal concerns. Rather, the courts have stated that the words must "take meaning from the purposes of regulatory legislation."[50] The Court has made clear that statutory language "cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme."[51] The Court has further instructed that one must "construe statutes, not isolated provisions."[52]

23. Indeed, that is how the Court in *CATCO* – the first U.S. Supreme Court case including the "all factors bearing on the public interest" language – interpreted the phrase "public convenience and necessity." In that case, the Court held that the public convenience and necessity requires the Commission to closely scrutinize initial rates *based on the framework and text* of the NGA.[53]

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evaluate all factors bearing on the public interest."). The Court never expounded further on that statement.

[49] *NAACP v. FERC*, 425 U.S. 662, 669 (1976).

[50] *Id.*; *see also Office of Consumers' Counsel v. FERC*, 655 F.2d 1132, 1147 (D.C. Cir. 1980) ("Any such authority to consider all factors bearing on the 'public interest' must take into account what the 'public interest' means in the context of the Natural Gas Act. FERC's authority to consider all factors bearing on the public interest when issuing certificates means authority to look into those factors which reasonably relate to the purposes for which FERC was given certification authority. It does not imply authority to issue orders regarding any circumstance in which FERC's regulatory tools might be useful.").

[51] *Davis v. Mich. Dep't of Treasury*, 489 U.S. 803, 809 (1989).

[52] *Graham Cty. Soil & Water Conservation Dist. v. U.S. ex rel. Wilson*, 559 U.S. 280, 290 (2010) (quoting *Gustafson v. Alloyd Co.*, 513 U.S. 561, 568 (1995)).

[53] *CATCO*, 360 U.S. 378, 388-91. The Court stated "[t]he Act was so framed as to afford consumers a complete, permanent and effective bond of protection from excessive rates and charges." *Id.* at 388. The Court found that the text of NGA sections 4 and 5 supported the premise that Congress designed the Act to provide complete protection from excessive rates and charges. *Id.* ("The heart of the Act is found in those provisions requiring . . . that all rates and charges 'made, demanded, or received' shall be 'just and reasonable.'"); *id.* at 389 ("The overriding intent of the Congress to give full protective coverage to the consumer as to price is further emphasized in § 5 of the Act . . . ."). The Court recognized that the Commission's role in setting initial rates was a critical component of providing consumers complete protection because "the delay incident to determination in § 5 proceedings through which initial certificated rates are reviewable

24. Following this precedent, the phrase "public convenience and necessity" must therefore be read within the overall statutory scheme of the NGA. As set forth below, construing the NGA *as a statute* demonstrates that Congress determined the public interest required (i) the public to have access to natural gas and (ii) economic regulation of the transportation and sale of natural gas to protect such public access.

### A. The text of the NGA does not support denying a certificate application based on the environmental effects of upstream natural gas production

#### 1. NGA section 1(a)—limited meaning of "public interest"

25. Section 1 of the NGA sets out the reason for its enactment. NGA section 1(a) states, "[a]s disclosed in reports of the Federal Trade Commission [(FTC)] made pursuant to S. Res. 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is declared that the business of 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*."[54]

26. A review of the FTC Report referred to in NGA section 1 demonstrates that the NGA was enacted to counter activities that would limit the public's access to natural gas and subject the public to abusive pricing. Specifically, the FTC Report states "[a]ll communities and industries within the capacity and reasonable distance of existing or future transmission facilities should be assured a natural-gas supply and receive it at fair, nondiscriminatory prices."[55]

27. The FTC Report further states "[a]ny proposed Federal legislation should be premised, in part at least, on the fact that natural gas is a valuable, but limited, natural resource in Nation-wide demand, which is produced only in certain States and limited areas, and the conservation, production, transportation, and distribution of which,

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appears nigh interminable" and "would provide a windfall for the natural gas company with a consequent squall for the consumers," which "Congress did not intend." *Id.* at 389-90.

[54] 15 U.S.C. § 717(a) (2018) (emphasis added).

[55] FEDERAL TRADE COMMISSION, UTILITY CORPORATIONS FINAL REPORT OF THE FEDERAL TRADE COMMISSION TO THE SENATE OF THE UNITED STATES PURSUANT TO SENATE RESOLUTION NO. 83, 70TH CONGRESS, 1ST SESSION ON ECONOMIC, CORPORATE, OPERATING, AND FINANCIAL PHASES OF THE NATURAL-GAS-PRODUCING, PIPE-LINE, AND UTILITY INDUSTRIES WITH CONCLUSIONS AND RECOMMENDATIONS NO. 84-A at 609 (1936) (FTC Report), https://babel.hathitrust.org/cgi/pt?id=ien.35556021351598&view=1up&seq=718.

therefore, under proper control and regulation, are matters charged with high national public interest."[56]

28. The text of NGA section 1(a) and its reference to the FTC Report make clear that "public interest" is directly linked to ensuring the public's access to natural gas through regulating its transport and sale. Moreover, the NGA is designed to promote the "public interest" primarily through economic regulation. This is apparent in the text of the NGA and by its reference to the FTC Report that identifies the concern with monopolistic activity that would limit access to natural gas.[57]

29. Therefore, there is no textual support in NGA section 1 for the claim that the Commission may deny a pipeline application due to potential upstream effects of GHG emissions on climate change. But, this is not the end of the analysis. We must also examine the Commission's specific authority under the NGA section 7.

### 2. NGA section 7—Congress grants the Commission and pipelines authority to ensure the public's access to natural gas

30. Like NGA section 1, the text of NGA section 7 makes clear that its purpose is to ensure that the public has access to natural gas. A review of the various provisions of NGA section 7 make this point evident:

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[56] *Id.* at 611.

[57] 15 U.S.C. § 717(a) (2018) ("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"). The limited, economic regulation meaning of "public interest" was clear at the time the NGA was adopted. The NGA's use of the phrase "affected with the public interest" is consistent with the States' use of this phrase when enacting laws regulating public utilities. Historically, state legislatures used the phrase "affected with the public interest" as the basis of their authority to regulate rates charged for the sale of commodities, rendered services, or use of private property. *Munn v. Illinois*, 94 U.S. 113, 125-26 (1876). The Court found that businesses affected with a public interest or "said to be clothed with a public interest justifying some public regulation" include "[b]usinesses, which, though not public at their inception, may be fairly said to have risen to be such and have become subject in consequence to some government regulation." *Charles Wolff Packing Co. v. Court of Indus. Relations*, 262 U.S. 522, 535 (1923). In essence, these businesses became quasi-public enterprises and were determined to have an "indispensable nature." *Id.* at 538. Such a conclusion also meant that if these businesses were not restrained by the government, the public could be subject to "the exorbitant charges and arbitrary control to which the public might be subjected without regulation." *Id.*

- Section 7(a) authorizes the Commission to "direct a natural-gas company to extend or improve its transportation facilities, to establish physical connection of its transportation facilities with the facilities of, and sell natural gas . . . to the public . . . ."[58] The Commission has stated that "[s]ection 7(a) clearly established the means whereby the Commission could secure *the benefits* of gas service for certain communities, markets and territories adjacent to those originally established by the gas industry, where in the public interest."[59]

- Section 7(b) requires Commission approval for a natural gas pipeline company to "abandon all or any portion of its facilities subject to the jurisdiction of the Commission, or any service rendered by means of such facilities."[60] That is, Congress considered access to natural gas to be so important that it even prohibited natural gas pipeline companies from abandoning service without Commission approval.

- Section 7(c)(1)(B) authorizes the Commission to "issue a temporary certificate in cases of emergency, to assure maintenance of adequate service or to serve particular customers, without notice or hearing, pending the determination of an application for a certificate."[61] The underlying presumption of this section is that the need for natural gas can be so important that the Commission can issue a certificate without notice and hearing.

- Section 7(e) states "a certificate *shall* be issued" when a project is in the public convenience and necessity,[62] leaving the Commission no discretion after determining a project meets the public convenience and necessity standard.

- Section 7(h) grants the pipeline certificate holder the powers of the sovereign to "exercise of the right of eminent domain in the district court of

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[58] 15 U.S.C. § 717f(a) (2018).

[59] *Arcadian Corp. v. Southern Nat. Gas Co.*, 61 FERC ¶ 61,183, at 61,676 (1992) (emphasis added). The Commission's analysis in this regard was unaffected by the opinion in *Atlanta Gas Light Co. v. FERC*, 140 F.3d 1392 (11th Cir. 1998) (vacating the Commission's 1991 and 1992 orders on other grounds).

[60] 15 U.S.C. § 717f(b) (2018).

[61] *Id.* § 717f(c)(1)(B).

[62] *Id.* § 717f(e) (emphasis added).

> the United States."[63] By granting the power of eminent domain, Congress made clear the importance of ensuring that natural gas could be delivered from its source to the public by not allowing traditional property rights to stand in the way of pipeline construction. Furthermore, the sovereign's power of eminent domain must be for a public use[64] and Congress considered natural gas pipelines a public use.

31. Each of these textual provisions illuminate the ultimate purpose of the NGA: to ensure that the public has access to natural gas because Congress considered such access to be in the public interest.[65] To now interpret "public convenience and necessity" to mean that the Commission has the authority to deny a certificate for a pipeline due to upstream emissions because the pipeline may result in access to, and the use of, natural gas would radically rewrite the NGA and undermine its stated purpose.

### 3. NGA section 1(b) and section 201 of the Federal Power Act (FPA)—authority over environmental effects related to upstream natural gas production reserved to States

32. Statutory text also confirms that control over the physical environmental effects related to upstream natural gas production are squarely reserved for the States. NGA section 1(b) provides that "[t]he provisions of this chapter . . . shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities for such distribution or to the production or gathering of natural gas."[66]

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[63] *Id.* § 717f(h).

[64] *Miss. & Rum River Boom Co. v. Patterson*, 98 U.S. 403, 406 (1878) ("The right of eminent domain, that is, the right to take private property for public uses, appertains to every independent government.").

[65] This interpretation is also supported by the Commission's 1999 Certificate Policy Statement. *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, 61,743 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement) ("[I]t should be designed to foster competitive markets, protect captive customers, and avoid unnecessary environmental and community impacts *while serving increasing demands for natural gas*.") (emphasis added); *id.* at 61,751 ("[T]he Commission is urged to authorize new pipeline capacity to meet an anticipated increase in demand for natural gas . . . .").

[66] 15 U.S.C. § 717(b) (2018); *see Pennzoil v. FERC*, 645 F.2d 360, 380-82 (5th Cir. 1981) (holding that FERC lacks the power to even interpret gas purchase agreements between producers and pipelines for the sale of gas that has been removed from NGA jurisdiction).

33. U.S. Supreme Court precedent and legislative history confirm that the regulation of the physical upstream production of gas is reserved for the States. The Court has observed that Congress enacted the NGA to address "specific evils" related to non-transparent rates for the interstate transportation and sale of natural gas and the monopoly power of holding companies that owned natural gas pipeline company stock.[67] The Court has also found that Congress enacted the NGA to

> fill the regulatory void created by the Court's earlier decisions prohibiting States from regulating interstate transportation and sales for resale of natural gas, while at the same time leaving undisturbed the recognized power of the States to regulate all in-state gas sales directly to consumers. Thus, the NGA "was drawn with meticulous regard for the continued exercise of state power, not to handicap it any way."[68]

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[67] *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 610 ("state commissions found it difficult or impossible to discover what it cost interstate pipe-line companies to deliver gas within the consuming states"); *id.* ("[T]he investigations of the Federal Trade Commission had disclosed the majority of the pipe-line mileage in the country used to transport natural gas, together with an increasing percentage of the natural gas supply for pipe-line transportation, had been acquired by a handful of holding companies."). Senate Resolution 83, which directed the FTC to develop the report that the NGA is founded on, also demonstrates that Congress was only concerned with consumer protection and monopoly power. The resolution directed the FTC to investigate capital assets and liabilities of natural gas companies, issuance of securities by the natural gas companies, the relationship between company stockholders and holding companies, other services provided by the holding companies, adverse impacts of holding companies controlling natural gas companies, and potential legislation to correct any abuses by holding companies. FTC Report at 1.

[68] *Gen. Motors Corp. v. Tracy*, 519 U.S. 278, 292 (1997) (internal citations omitted) (quoting *Panhandle*, 332 U.S. 507, 516-22)); *see also Nw. Cent. Pipeline v. State Corp. Comm'n*, 489 U.S. 493, 512 (1989) ("The NGA 'was designed to supplement state power and to produce a harmonious and comprehensive regulation of the industry. Neither state nor federal regulatory body was to encroach upon the jurisdiction of the other.'" (quoting *Panhandle*, 332 U.S. at 513)); *Panhandle*, 332 U.S. at 520 (In recognizing that the NGA articulated a legislative program recognizing the respective responsibilities of federal and state regulatory agencies, the Court noted that the NGA does not "contemplate ineffective regulation at either level as Congress meant to create a comprehensive and effective regulatory scheme, complementary in its operation to those of the states and in no manner usurping their authority."). Congress continued to draw the NGA with meticulous regard to State power when it amended the NGA in 1954 to add the Hinshaw pipeline exemption so as "to preserve state control over local distributors who purchase gas from interstate pipelines." *Louisiana Power & Light Co. v.*

34. In *Transco*,[69] the Court also recognized that "Congress did not desire that an important aspect of this field be left unregulated."[70] Thus, the Court held that where congressional authority is not explicit and States cannot practicably regulate a given area, the Commission can consider the issue in its public convenience and necessity determination.[71]

35. Based on this rule, and legislative history,[72] the *Transco* Court found that in its public convenience and necessity determination, the Commission appropriately considered whether the end-use of the gas in a non-producing state was economically wasteful as there was a regulatory gap and no State could be expected to control how gas is used in another State.[73] The Court also impressed that

> The Commission ha[d] not attempted to exert its influence over such "*physically*" wasteful practices as improper well spacing and the flaring of unused gas which result in the entire loss of gas and are properly of concern to the producing State; nor has the Commission attempted to regulate the "economic" aspects of gas used within the producing State.[74]

36. In contrast, there is no legislative history to support the Commission considering environmental effects related to upstream natural gas production. Furthermore, the field of environmental regulation of production activities is not one that has been left unregulated. Unlike in *Transco*, States can reasonably be expected to regulate air emissions from upstream natural gas production: "air pollution control at its source is the primary responsibility of States and local governments."[75] The Clean Air Act vests States with authority to issue permits to regulate stationary sources related to upstream activities.[76] In addition, pursuant to their police powers, States have the ability to

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*Fed. Power Comm'n*, 483 F.2d 623, 633 (5th Cir. 1973).

[69] *Transco*, 365 U.S. 1 (1961).

[70] *Id.* at 19.

[71] *Id*. at 19-20.

[72] *Id.* at 10-19.

[73] *Id.* at 20-21.

[74] *Id.* at 20 (emphasis added).

[75] 42 U.S.C. § 7401 (2018).

[76] *Id.* § 7661e ("Nothing in this subchapter shall prevent a State, or interstate permitting authority, from establishing additional permitting requirements not

regulate environmental effects related to upstream natural gas production within their jurisdictions.[77]

37. Some may make the argument that "considering" the environmental effects related to upstream production is hardly "regulating" such activities. I disagree. For the Commission to consider such effects would be an attempt to exert influence over States' regulation of physical upstream natural gas production, which the Court in *Transco* suggested would be encroaching upon forbidden ground. If, for example, the Commission considered and denied a certificate based on the GHG emissions released from production activities, the Commission would be making a judgment that such production is too harmful for the environment and preempting a State's authority to decide whether and how to regulate upstream natural gas production. Such exertion of influence is impermissible: "when the Congress explicitly reserves jurisdiction over a matter to the states, as here, the Commission has no business considering how to 'induc[e] a change [of state] policy' with respect to that matter."[78]

38. Hence, there is no jurisdictional gap in regulating GHG emissions for the Commission to fill. The NGA reserves authority over upstream natural gas production to the States, and States can practicably regulate GHGs emitted by those activities. And, even if there were a gap that federal regulation could fill, as discussed below, it is nonsensical for the Commission to attempt to fill a gap that Congress has clearly meant for the EPA to occupy.[79] Therefore, because GHG emissions from upstream natural gas production are not properly of concern to the Commission, the Commission cannot deny a certificate application based on such effects.

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inconsistent with this chapter."). The Act defines "permitting authority" as "the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this subchapter." *Id.* § 7661.

[77] *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440, 442 (1960) ("Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the more traditional concept of what is compendiously known as the police power.").

[78] *Altamont Gas Transmission Co. v. FERC*, 92 F.3d 1239, 1248 (D.C. Cir. 1996); *see ANR Pipeline Co. v. FERC*, 876 F.2d 124, 132 (D.C. Cir. 1989) ("We think it would be a considerable stretch from there to say that, in certifying transportation that is necessary to carry out a sale, the Commission is required to reconsider the very aspects of the sale that have been assessed by an agency specifically vested by Congress with authority over the subject.").

[79] *See infra* PP 60-64.

### B. Denying a pipeline based on upstream environmental effects would undermine other acts of Congress

39. Since enactment of the NGA and NEPA, Congress has enacted additional legislation promoting the production and use of natural gas and limiting the Commission's authority over the natural gas commodity. Each of these legislation enactments indicates that the Commission's authority over upstream natural gas production has been further limited by Congress. Arguments that the Commission can rely on the NGA's public convenience and necessity standard and NEPA to deny a pipeline application so as to prevent upstream gas production would undermine these acts of Congress.

#### 1. Natural Gas Policy Act of 1978

40. Determining that federal regulation of natural gas limited interstate access to the commodity, resulting in shortages and high prices, Congress passed the Natural Gas Policy Act of 1978 (NGPA). The NGPA significantly deregulated the natural gas industry.[80] Importantly, NGPA section 601(c)(1) states, "[t]he Commission may not deny, or condition the grant of, any certificate under section 7 of the Natural Gas Act based upon the amount paid in any sale of natural gas, if such amount is deemed to be just and reasonable under subsection (b) of this section."[81]

41. Besides using price deregulation to promote access to natural gas, Congress gave explicit powers to the President to ensure that natural gas reached consumers. NGPA section 302(c) explicitly provides, "[t]he President may, by order, require any pipeline to transport natural gas, and to construct and operate such facilities for the transportation of natural gas, as he determines necessary to carry out any contract authorized under subsection (a)."[82] Similarly, the NGPA gave authority to the Secretary of Energy to promote access to natural gas.[83]

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[80] Generally, the NGPA limited the Commission's authority over gas that is not transported in interstate commerce, new sales of gas, sales of gas and transportation by Hinshaw pipelines, and certain sales, transportation and allocation of gas during certain gas supply emergencies. *See, e.g.*, NGPA sections 601(a)(1)(A)-(D), 15 U.S.C. § 3431(a)(1)(A)-(D) (2018).

[81] *Id.* § 3431(c)(1) (2018). In addition, section 121(a) provides, "the provisions of subtitle A respecting the maximum lawful price for the first sale of each of the following categories of natural gas shall, except as provided in subsections (d) and (e), cease to apply effective January 1, 1985." 15 U.S.C. § 3331(a), *repealed by* the Wellhead Decontrol Act of 1989, Pub. L. 101-60 § 2(b), 103 Stat. 157 (1989).

[82] *Id.* § 3362.

[83] *See id.* § 3391(a) ("[T]he Secretary of Energy shall prescribe and make effective

42. There can be no doubt about the plain language of the NGPA: the Court observed that Congress passed the NGPA to "promote gas transportation by interstate and intrastate pipelines."[84] Furthermore, the NGPA was "intended to provide investors with adequate incentive to develop new sources of supply."[85]

### 2. Powerplant and Industrial Fuel Use Act of 1978

43. With respect to natural gas as a fuel source for electric generation, in 1987 Congress repealed sections of the Powerplant and Industrial Fuel Use Act of 1978 (Fuel Use Act),[86] which had restricted the use of natural gas in electric generation so as to conserve it for other uses. With the repeal of the Fuel Use Act, Congress made clear that natural gas could be used for electric generation and that the regulation of the use of natural gas by power plants unnecessary.[87]

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a rule . . . which provides . . . no curtailment plan of an interstate pipeline may provide for curtailment of deliveries for any essential agricultural use . . . ."); *id.* § 3392(a) ("The Secretary of Energy shall prescribe and make effective a rule which provides that notwithstanding any other provisions of law (other than subsection (b)) and to the maximum extent practicable, no interstate pipeline may curtail deliveries of natural gas for any essential industrial process or feedstock use. . . ."); *id.* § 3392(a) ("The Secretary of Energy shall determine and certify to the Commission the natural gas requirements (expressed either as volumes or percentages of use) of persons (or classes thereof) for essential industrial process and feedstock uses (other than those referred to in section 3391(f)(1)(B))."); *id.* § 3393(a) ("The Secretary of Energy shall prescribe the rules under sections 3391 and 3392 of this title pursuant to his authority under the Department of Energy Organization Act to establish and review priorities for curtailments under the Natural Gas Act.").

[84] *Gen. Motors Corp. v. Tracy*, 519 U.S. at 283 (quoting 57 Fed. Reg. 13271 (Apr. 16, 1992)).

[85] *Pub. Serv. Comm'n of State of N.Y. v. Mid-Louisiana Gas Co.*, 463 U.S. 319, 334 (1983).

[86] 42 U.S.C. § 8342, *repealed by* Pub. L. 100-42, § 1(a), 101 Stat. 310 (1987).

[87] The Commission need not look any further than the text of the statutes to determine its authority. In the case of the repeal of the Fuel Use Act, the legislative history is informative as to Congress's reasoning. *See* H.R. Rep. 100-78 *2 ("By amending [Fuel Use Act], H.R. 1941 will remove artificial government restrictions on the use of oil and gas; allow energy consumers to make their own fuel choices in an increasingly deregulated energy marketplace; encourage multifuel competition among oil, gas, coal, and other fuels based on their price, availability, and environmental merits; preserve the 'coal option' for new baseload electric powerplants which are long-lived and

### 3. Natural Gas Wellhead Decontrol Act of 1989

44. If there were any remaining doubt that the Commission has no authority to consider the upstream production of natural gas and its environmental effects, such doubt was put to rest when Congress enacted the Wellhead Decontrol Act.[88] In this legislation, Congress specifically removed the Commission's authority over the upstream gas production.[89]

45. But the Wellhead Decontrol Act was not merely about deregulating upstream natural gas production. Congress explained that the reason for deregulating natural gas at the wellhead was important to ensuring that end users had access to the commodity. The Senate Committee Report for the Decontrol Act stated "the purpose (of the legislation) is to promote competition for natural gas at the wellhead *to ensure consumers an adequate and reliable supply of natural gas at the lowest reasonable price*."[90] Similarly, the House Committee Report to the Decontrol Act noted, "[a]ll sellers must be able to reasonably reach the highest-bidding buyer in an increasingly national market. All buyers must be free to reach the lowest-selling producer, and obtain shipment of its gas to them on even terms with other suppliers."[91] The House Committee Report also stated the Commission's "current competitive 'open access' pipeline system [should be]

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use so much fuel; and provide potential new markets for financially distressed oil and gas producers."); *id.* *6 ("Indeed, a major purpose of this bill is to allow individual choices and competition and fuels and technologies . . . ."); *see also* President Ronald Reagan's Remarks on Signing H.R. 1941 Into Law, 23 WEEKLY COMP. PRES. DOC. 568, (May 21, 1987) ("This legislation eliminates unnecessary restrictions on the use of natural gas. It promotes efficient production and development of our energy resources by returning fuel choices to the marketplace. I've long believed that our country's natural gas resources should be free from regulatory burdens that are costly and counterproductive.").

[88] Pub. L. 101-60, 103 Stat. 157 (1989).

[89] The Wellhead Decontrol Act amended NGPA section 601(a)(1)(A) to read, "[f]or purposes of section 1(b) of the Natural Gas Act, the provisions of the Natural Gas Act and the jurisdiction of the Commission under such Act shall not apply to any natural gas solely by reason of any first sale of such natural gas." 15 U.S.C. § 3431(a)(1)(A), *amended by*, Pub. L. 101-60 § 3(a)(7)(A), 103 Stat. 157 (1989). *United Distrib. Cos. v. FERC*, 88 F.3d 1105, 1166 (D.C. Cir. 1996) ("That enactment contemplates a considerably changed natural gas world in which regulation plays a much reduced role and the free market operates at the wellhead.").

[90] S. Rep. No. 101-39 at 1 (emphasis added).

[91] H.R. Rep. No. 101-29 at 6.

maintained."[92] With this statement, the House Committee Report was referencing Order No. 436 in which the Commission stated that open access transportation "is designed to remove any unnecessary regulatory obstacles and to facilitate transportation of gas to any end user that requests transportation service."[93]

#### 4. Energy Policy Act of 1992

46. In the Energy Policy Act of 1992 (EPAct 1992), Congress also expressed a preference for providing the public access to natural gas. EPAct section 202 states, "[i]t is the sense of the Congress that natural gas consumers and producers, and the national economy, are best served by a competitive natural gas wellhead market."[94]

47. The NGA, NGPA, the repeal of the Fuel Use Act, the Wellhead Decontrol Act, and EPAct 1992 each reflect Congressional mandates to promote the production, transportation, and use of natural gas. None of these acts, and no other law, including NEPA, modifies the presumption in the NGA to facilitate access to natural gas. And, it is not for the Commission to substitute its judgment for that of Congress in determining energy policy.

### C. "Public convenience and necessity" does not support consideration of environment effects related to upstream natural gas production

48. In addition to considering the text of the NGA as a whole and subsequent-related acts, we must interpret the phrase "public convenience and necessity" as used when enacted. As discussed below, "public convenience and necessity" has always been understood to mean "need" for the service. To the extent the environment is considered, such consideration is limited to the effects stemming from the construction and operation of the proposed facilities and is not as broad as some would believe.[95]

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[92] *Id.* at 7.

[93] *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 436, 50 Fed. Reg. 42,408, 42,478 (Oct. 18, 1985) (Order No. 436).

[94] Pub. L. No. 102-486, 106 Stat. 2776 (1992).

[95] Some will cite the reference to environment in footnote 6 in *NAACP v. FPC* to argue that the Commission can consider the environmental effects of upstream gas production. *NAACP v. FERC*, 425 U.S. 662, 670 n.6. The Court's statement does not support that argument. The Court states that the environment could be a subsidiary purpose of the NGA and FPA by referencing FPA section 10, which states the Commission shall consider whether a hydroelectric project is best adapted to a comprehensive waterway by considering, among other things, the proposed *hydroelectric project's effect* on the adequate protection, mitigation, and enhancement of fish and wildlife. Nothing in the Court's statement or the citation would support the consideration

49. When Congress enacted the NGA, the phrase "public convenience and necessity" was a term of art used in state and federal public utility regulation.[96] In 1939, one year after the NGA's enactment, the Commission's predecessor agency, the Federal Power Commission, defined public convenience and necessity as "a public need or benefit without which the public is inconvenienced to the extent of being handicapped in the pursuit of business or comfort or both, without which the public generally in the area involved is denied to its detriment that which is enjoyed by the public of other areas similarly situated."[97] To make such showing, the Commission required certificate applicants to demonstrate that the public needed its proposed project, the applicant could perform the proposed service, and the service would be provided at reasonable rates.[98]

50. To the extent that public convenience and necessity included factors other than need, they were limited and directly related to the proposed facilities, not upstream effects related to the natural gas commodity. Such considerations included the effects on pipeline competition, duplication of facilities, and social costs, such as misuse of eminent domain and environmental impacts resulting from the creation of the right-of-way or service.[99] For example, the Commonwealth of Massachusetts considered environmental impacts resulting from the creation of the right-of-way and service in denying an application to build a railroad along a beach. The Commonwealth found that "the demand for train service was held to be outweighed by the fact the beach traversed 'will cease to be attractive when it is defaced and made dangerous by a steam railroad.'"[100]

51. The Commission's current guidance for determining whether a proposed project is in the public convenience and necessity is consistent with the historic use of the term. As

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of upstream impacts under the NGA.

[96] William K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 427-28 (1979) (Jones).

[97] *Kan. Pipe Line & Gas Co.*, 2 FPC 29, 56 (1939).

[98] *See* Order No. 436, at 42,474 (listing the requirements outlined in *Kan. Pipe Line & Gas Co.*: "(1) they possess a supply of natural gas adequate to meet those demands which it is reasonable to assume will be made upon them; (2) there exist in the territory proposed to be served customers who can reasonably be expected to use such natural-gas service; (3) the facilities for which they seek a certificate are adequate; (4) the costs of construction of the facilities which they propose are both adequate and reasonable; (5) the anticipated fixed charges or the amount of such fixed charges are reasonable; and (6) the rates proposed to be charged are reasonable.")

[99] Jones at 428.

[100] *Id.* at 436.

outlined in its 1999 Certificate Policy Statement, the Commission implements an economic balancing test that is focused on whether there is a need for the facilities and adverse economic effects stemming from the construction and operation of the proposed facilities themselves. The Commission designed its balancing test "to foster competitive markets, protect captive customers, and avoid unnecessary environmental and community impacts while serving increasing demands for natural gas."[101] The Commission also stated that its balancing test "provide[s] appropriate incentives for the optimal level of construction and efficient customer choices."[102] To accomplish these objectives, the Commission determines whether a project is in the public convenience and necessity by balancing the public benefits of the project against the adverse economic impacts on the applicant's existing shippers, competitor pipelines and their captive customers, and landowners.[103]

52. Although the Certificate Policy Statement also recognizes the need to consider certain environmental issues related to a project, it makes clear that the environmental impacts to be considered are related to the construction and operation of the pipeline itself and the creation of the right-of-way.[104] As noted above, it is the Commission's objective to avoid *unnecessary* environmental impacts, meaning to route the pipeline to avoid environmental effects where possible and feasible, not to prevent or mitigate environmental effects from upstream natural gas production. This is confirmed when one considers that, if the project had unnecessary adverse environmental effects, the Commission would require the applicant to reroute the pipeline: "If the environmental analysis following a preliminary determination indicates a preferred route other than the one proposed by the applicant, the earlier balancing of the public benefits of the project against its adverse effects would be reopened to take into account the adverse effects on landowners who would be affected by the changed route."[105]

53. Further, the Certificate Policy Statement provides, "[i]deally, an applicant will structure its proposed project to avoid adverse economic, competitive, environmental, or other effects on the relevant interests from the construction of the new project."[106] And

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[101] Certificate Policy Statement, 88 FERC ¶ at 61,743.

[102] *Id.*

[103] *Id.*

[104] *See also Ctr. for Biological Diversity v. U.S. Army Corps of Eng'rs*, 941 F.3d 1288, 1299 (11th Cir. 2019) ("Regulations cannot contradict their animating statutes or manufacture additional agency power.") (citing *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 125-26 (2000)).

[105] Certificate Policy Statement, 88 FERC ¶ at 61,749.

[106] *Id.* at 61,747.

that is what occurred in this case. Pacific Connector revised its route crossing the Pacific Crescent Trail to reduce the amount of Forest Service lands affected and reduce impacts on northern-spotted owl critical and suitable habitat.[107] Further, Pacific Connector rerouted the pipeline to avoid areas that posed moderate to high potential landslide risk. These examples are consistent with the NGA's and Certificate Policy Statement's focus on environmental impacts related to the construction and operation of the pipeline itself and the creation of the right-of-way.[108]

54. In sum, the meaning of "public convenience and necessity" does not support weighing the public need for the project against effects related to upstream natural gas production.

### D. NEPA does not authorize the Commission to deny a certificate application based on emissions from upstream gas production

55. The text of the NGA, and the related subsequent acts by Congress, cannot be revised by NEPA or CEQ regulations to authorize the Commission to deny a certificate application based on effects from upstream gas production.

56. The courts have made clear that NEPA does not expand a federal agency's substantive or jurisdictional powers.[109] Nor does NEPA repeal by implication any other statute.[110] Rather, NEPA is a merely procedural statute that requires federal agencies to take a "hard look" at the environmental effects of a proposed action before acting on it.[111]

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[107] Final EIS at 3-49.

[108] *Id.* at 4-24.

[109] *Nat. Res. Def. Council, Inc. v. EPA*, 822 F.2d 104, 129 (D.C. Cir. 1987) ("NEPA, as a procedural device, does not work a broadening of the agency's substantive powers. Whatever action the agency chooses to take must, of course, be within its province in the first instance.") (citations omitted); *Cape May Greene, Inc. v. Warren*, 698 F.2d 179, 188 (3d Cir. 1986) ("The National Environmental Policy Act does not expand the jurisdiction of an agency beyond that set forth in its organic statute."); *Gage v. U.S. Atomic Energy Comm'n*, 479 F.2d 1214, 1220 n.19 (D.C. Cir. 1973) ("NEPA does not mandate action which goes beyond the agency's organic jurisdiction."); *see also Flint Ridge Dev. Co. v. Scenic Rivers Ass'n of Okla.*, 426 U.S. 776, 788 (1976) ("where a clear and unavoidable conflict in statutory authority exists, NEPA must give way").

[110] *U.S. v. Students Challenging Regulatory Agency Procedures*, 412 U.S. 669, 694 (1973).

[111] *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978) ("NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.").

NEPA also does not require a particular result. In fact, the Supreme Court has stated, even if a NEPA analysis identifies an environmental harm, the agency can still approve the project.[112]

57. Further, CEQ's regulations on indirect effects cannot make the GHG emissions from upstream production part of the Commission's public convenience and necessity determination under the NGA. As stated above, an agency's obligation under NEPA to consider indirect environmental effects is not limitless. Indirect effects must have "a reasonably close causal relationship" with the alleged cause, and that relationship is dependent on the "underlying policies or legislative intent."[113] NEPA requires such reasonably close causal relationship because "inherent in NEPA and its implementing regulations is a 'rule of reason,'"[114] which "recognizes that it is pointless to require agencies to consider information they have no power to act on, or effects they have no power to prevent."[115] Thus, "where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect."[116]

58. The Commission has no power to deny a certificate for effects related to the upstream production of natural gas. As explained above, the Commission's consideration of adverse environmental effects is limited to those effects stemming from the

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[112] *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) ("Although these procedures are almost certain to affect the agency's substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.").

[113] *Metro. Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 774 n.7 (1983).

[114] *Pub. Citizen*, 541 U.S. at 767.

[115] *Ctr. for Biological Diversity*, 941 F.3d at 1297; *see also Town of Barnstable v. FAA*, 740 F.3d 681, 691 (D.C. Cir. 2014) ("NEPA's 'rule of reason' does not require the FAA to prepare EIS when it would 'serve no purpose.'").

[116] *Pub. Citizen*, 541 U.S. at 770; *see also Town of Barnstable*, 740 F.3d at 691 ("Because the FAA 'simply lacks the power to act on whatever information might be contained in the [environmental impact ('EIS')],' NEPA does not apply to its no hazard determinations.") (internal citation omitted); *Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177, 196-97 (4th Cir. 2009) (finding that the U.S. Army Corps of Engineers (Corps) was not required to consider the valley fill projects because "[West Virginia Department of Environmental Protection], and not the Corps, [had] 'control and responsibility' over all aspects of the valley fill projects beyond the filling of jurisdictional waters.").

construction and operation of the pipeline facility and the related right-of-way. For the Commission to deny a pipeline based on GHGs emitted from upstream gas production would be contrary to the text of the NGA and subsequent acts by Congress. The NGA reserves such considerations for the States, and the Commission must respect the jurisdictional boundaries set by Congress. Suggesting that the Commission can consider such effects not only risks duplicative regulation but in fact defies Congress.

## III. The NGA does not contemplate the Commission establishing mitigation for GHG emissions from LNG or pipeline facilities

59. My colleague has also suggested that the Commission should require the mitigation of GHG emissions from the authorized LNG and pipeline facilities and the upstream production of natural gas transported on those facilities. I understand his suggestions as proposing a carbon emissions fee, offsets or tax (similar to the Corps' compensatory wetland mitigation program), technology requirements (such as scrubbers or electric-powered compressor units),[117] or emission caps. Some argue that the Commission can require such mitigation under NGA section 3(e)(3)(A) or NGA section 7(e). NGA section 3(e)(3)(A) provides, "the Commission may approve an application . . . in whole or part, with such modifications and upon such terms and conditions as the Commission find necessary or appropriate."[118] NGA section 7(e) provides "[t]he Commission shall have the power to attach to the issuance of the certificate . . . such reasonable terms and conditions as the public convenience and necessity may require."[119]

60. I disagree. The Commission cannot interpret NGA section 3(e) or section 7(e) to allow the Commission to unilaterally establish measures to mitigate GHG emissions because Congress, through the Clean Air Act, assigned the EPA and the States exclusive authority to establish such measures. Congress designated the EPA as the expert agency "best suited to serve as primary regulator of greenhouse gas emissions," [120] not the Commission.

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[117] It is also important to consider the impact on reliability that would result from requiring electric-compressor units on a gas pipeline. In the event of a power outage, a pipeline with electric-compressor units may be unable to compress and transport gas to end-users, including power plants and residences for heating and cooking.

[118] 15 U.S.C. § 717b(3)(e)(3)(A) (2018).

[119] *Id.* § 717f(e).

[120] *American Elec. Power Co., Inc. v. Conn.*, 564 U.S. 410, 428 (2011).

61. The Clean Air Act establishes an all-encompassing regulatory program, supervised by the EPA to deal comprehensively with interstate air pollution.[121] Congress entrusted the Administrator of the EPA with significant discretion to determine appropriate emissions measures. Congress delegated the Administrator the authority to determine whether pipelines and other stationary sources endanger public health and welfare; section 111 of the Clean Air Act directs the Administrator of the EPA "to publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in *his judgment* it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare"[122] and to establish standards of performance for the identified stationary sources.[123] The Clean Air Act requires the Administrator to conduct complex balancing when determining a standard of performance, taking into consideration what is technologically achievable and the cost to achieve that standard.[124]

62. In addition, the Clean Air Act allows the Administrator to "distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards."[125] The Act also permits the Administrator, with the consent of the Governor of the State in which the source is to be located, to waive its requirements "to encourage the use of an innovative technological system or systems of continuous emission reduction."[126]

63. Congress also intended that states would have a role in establishing measures to mitigate emissions from stationary sources. Section 111(f) notes that "[b]efore promulgating any regulations . . . or listing any category of major stationary sources . . . the Administrator shall consult with appropriate representatives of the Governors and of State air pollution control agencies."[127]

64. Thus, the text of the Clean Air Act demonstrates it is improbable that NGA section 3(e)(3)(A) or NGA section 7(e) allow the Commission to establish GHG emission standards or mitigation measures out of whole cloth. To argue otherwise would defeat

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[121] *See id.* at 419.

[122] 42 U.S.C. § 7411(b)(1)(A) (2018).

[123] *Id.* § 7411(b)(1)(B).

[124] *Id.* § 7411(a)(1).

[125] *Id.* § 7411(a)(2).

[126] *Id.* § 7411(j)(1)(A).

[127] *Id.* § 7411(f)(3).

the significant discretion and complex balancing that the Clean Air Act entrusts in the EPA Administrator, and would eliminate the role of the States.

65. Furthermore, to argue that the Commission may use its NGA conditioning authority to establish GHG emission mitigation—a field in which the Commission has no expertise—and address climate change—an issue that has been subject to profound debate across our nation for decades—is an extraordinary leap. The Supreme Court's "major rules" canon advises that agency rules on issues that have vast economic and political significance must be treated "with a measure of skepticism" and require Congress to provide clear authorization.[128] The Court has articulated this canon because Congress does not "hide elephants in mouseholes"[129] and "Congress is more likely to have focused upon, and answered, major questions, while leaving interstitial matters to answer themselves in the course of the statute's daily administration."[130]

66. Courts would undoubtedly treat with skepticism any attempt by the Commission to mitigate GHG emissions. Congress has introduced climate change bills since at least 1977,[131] over four decades ago. Over the last 15 years, Congress has introduced and failed to pass 70 legislative bills to reduce GHG emissions—29 of those were carbon emission fees or taxes.[132] For the Commission to suddenly declare such climate

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[128] *Util. Air Regulatory Grp. v. EPA*, 573 U.S. 302, 324 (2014); *Brown & Williamson*, 529 U.S. at 160 ("Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion."); *see also Gonzales v. Oregon*, 546 U.S. 243, 267-68 (2006) (finding regulation regarding issue of profound debate suspect).

[129] *Whitman v. American Trucking Ass.*, 531 U.S. 457, 468 (2001).

[130] *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 12, 159 (quoting Justice Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 370 (1986)); *see also* Abbe R. Gluck & Lisa Schultz Bressman, *Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons: PART I*, 65 STAN. L. REV. 901, 1004 (2013) ("Major policy questions, major economic questions, major political questions, preemption questions are all the same. Drafters don't intend to leave them unresolved.").

[131] National Climate Program Act, S. 1980, 95th Cong. (1977).

[132] CONGRESSIONAL RESEARCH SERVICE, MARKET-BASED GREENHOUSE GAS EMISSION REDUCTION LEGISLATION: 108TH THROUGH 116TH CONGRESSES at 3 (Oct. 23, 2019), https://fas.org/sgp/crs/misc/R45472.pdfhttps://fas.org/sgp/crs/misc/R45472.pdf. Likewise, the CEQ issued guidance on the consideration of GHG emissions in 2010, 2014, 2016, and 2019. None of those documents require, let alone recommend, that an agency establish a carbon emissions fee or tax.

mitigation power resides in the long-extant NGA and that Congress's efforts were superfluous strains credibility. Establishing a carbon emissions fee or tax, or GHG mitigation out of whole cloth would be a major rule, and Congress has made no indication that the Commission has such authority.

67. Some may make the argument that the Commission can develop mitigation measures without establishing a standard. I disagree. Establishing mitigation measures requires determining how much mitigation is required – i.e., setting a limit, or establishing a standard, that quantifies the amount of GHG emissions that will adversely affect the human environment. Some may also argue that the Commission has unilaterally established mitigation in other contexts, including wetlands, soil conservation, and noise. These examples, however, are distinguishable. Congress did not exclusively assign the authority to establish avoidance or restoration measures for mitigating effects on wetlands or soil to a specific agency. The Corps and the EPA developed a wetlands mitigation bank program pursuant to section 404 of the Clean Water Act.[133] Congress endorsed such mitigation.[134] As for noise, the Clean Air Act assigns the EPA Administrator authority over determining the level of noise that amounts to a public nuisance and requires federal agencies to consult with the EPA when its actions exceed the public nuisance standard.[135] The Commission complies with the Clean Air Act by requiring project noise levels in certain areas to not exceed 55 dBA Ldn, as required by EPA's guidelines.[136]

68. Accordingly, there is no support that the Commission can use its NGA section 3(e) or section 7(e) authority to establish measures to mitigate GHG emissions from proposed LNG or pipeline facilities or from upstream gas production.[137]

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[133] 33 U.S.C. § 1344 (2018).

[134] *See* Water Resources Development Act, Pub. L. 110-114, § 2036(c), 121 Stat. 1041, 1094 (2007); National Defense Authorization Act, Pub. L. 108-136, § 314, 117 Stat. 1392, 1430 (2004); Transportation Equity Act for the 21st Century, Pub. L. 105-178, § 103 (b)(6)(M), 112 Stat. 107, 133 (1998); Water Resources Development Act of 1990, Pub. L. 101-640, § (a)(18)(C), 104 Stat. 4604, 4609 (1990).

[135] 42 U.S.C. § 7641(c) ("In any case where any Federal department or agency is carrying out or sponsoring any activity resulting in noise which the Administrator determines amounts to a public nuisance or is otherwise objectionable, such department or agency shall consult with the Administrator to determine possible means of abating such noise.").

[136] *See Williams Gas Pipelines Cent., Inc.*, 93 FERC ¶ 61,159, at 61,531-52 (2000).

[137] In addition, requiring a pipeline to mitigate emissions from upstream gas

## IV. The Commission has no reliable objective standard for determining whether GHG emissions significantly affect the environment

69. My colleague has argued that the Commission violates the NGA and NEPA by not determining the significance of GHG emissions that are effects of a project.[138] He has challenged the Commission's explanation that it cannot determine significance because there is no standard for determining the significance of GHG emissions.[139] He has argued that the Commission can adopt the Social Cost of Carbon[140] to determine whether GHG emissions are significant or rely on its own expertise as it does for other environmental resources, such as vegetation, wildlife, or open land.[141] He has suggested that the Commission does not make a finding of significance in order to deceptively find that a project is in the public convenience and necessity.

70. I disagree. 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, and the Commission has no authority or objective basis using its own expertise to make such determination.

### A. Social Cost of Carbon is not a suitable method to determine significance

71. The Commission has found, and I agree, that the Social Cost of Carbon is not a suitable method for the Commission to determine significance of GHG emissions.[142] Because the courts have repeatedly upheld the Commission's reasoning,[143] I will not restate the Commission's reasoning here.

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production would not be "a reasonable term or condition as the public convenience and necessity may require." 15 U.S.C. § 717f(e) (2018). It would be unreasonable to require a pipeline to mitigate an effect it has no control over. Further, as discussed above, emissions from upstream gas production are not relevant to the NGA's public convenience and necessity determination.

[138] Cheyenne Connector PP 2, 7.

[139] *Id.* P 12.

[140] *Id.* P 13.

[141] *Adelphia Gateway, LLC*, 169 FERC ¶ 61,220 at P 10 (Glick, Comm'r, dissenting).

[142] *Fla. Se. Connection, LLC*, 162 FERC ¶ 61,233, at P 48 (2018).

[143] *Appalachian Voices*, 2019 WL 847199, *2; *EarthReports, Inc.*, 828 F.3d 949, 956; *Sierra Club v. FERC*, 672 F. App'x 38, (D.C. Cir. 2016); *see also Citizens for a*

72. However, I will address the suggestion that the Social Cost of Carbon can translate a project's impact on climate change into "concrete and comprehensible terms" that will help inform agency decision-makers and the public at large.[144] The Social Cost of Carbon, described as an estimate of "the monetized damages associated with an incremental increase in carbon emissions in a given year,"[145] may appear straightforward. On closer inspection, however, the Social Cost of Carbon and its calculated outputs are not so simple to interpret or evaluate.[146] When the Social Cost of Carbon estimates that one metric ton of $CO_2$ costs $12 (the 2020 cost using a discount rate of 5 percent),[147] agency decision-makers and the public have no objective basis or benchmark to determine whether that cost is significant. Bare numbers standing alone simply *cannot* ascribe significance.

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*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); *High Country Conservation Advocates v. U.S. Forest Serv.*, 333 F. Supp. 3d 1107, 1132 (D. Colo. 2018) ("[T]he *High Country* decision did not mandate that the Agencies apply the social cost of carbon protocol in their decisions; the court merely found arbitrary the Agencies' failure to do so without explanation.").

[144] Cheyenne Connector Dissent P 13.

[145] Interagency Working Group on the Social Cost of Greenhouse Gases, *Technical Support Document – Technical Update of the Social Cost of Carbon for Regulatory impact Analysis – Under Executive Order 12866* at 1 (Aug. 2016), https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf (2016 Technical Support Document).

[146] In fact, the website for the Climate Framework for Uncertainty Negotiation and Distribution (FUND) – one of the three integrated assessment models that the Social Cost of Carbon uses – states "[m]odels are often quite useless in unexperienced hands, and sometimes misleading. No one is smart enough to master in a short period what took someone else years to develop. Not-understood models are irrelevant, half-understood models are treacherous, and mis-understood models dangerous." FUND-Climate Framework for Uncertainty, Negotiation and Distribution, http://www.fund-model.org/ (LAST VISITED NOV. 18, 2019).

[147] *See* 2016 Technical Support Document at 4. The Social Cost of Carbon produces wide-ranging dollar values based upon a chosen 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. *Id.*

### B. The Commission has no authority or objective basis to establish its own framework

73. Some argue that the lack of externally established targets does not relieve the Commission from establishing a framework or targets on its own. Some have suggested that the Commission can make up its own framework, citing the Commission's framework for determining return on equity (ROE) as an example. However, they overlook the fact that Congress designated the EPA, not the Commission, with exclusive authority to determine the amount of emissions that are harmful to the environment. In addition, there are no available resources or agency expertise upon which the Commission could reasonably base a framework or target.

74. As I explain above, Congress enacted the Clean Air Act to establish an all-encompassing regulatory program, supervised by the EPA to deal comprehensively with interstate air pollution. Section 111 of the Clean Air Act directs the Administrator of the EPA to identify stationary sources that "in his judgment cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare"[148] and to establish standards of performance for the identified stationary sources.[149] Thus, the EPA has exclusive authority for determining whether emissions from pipeline facilities will have a significant effect on the environment.

75. Further, the Commission is not positioned to unilaterally establish a standard for determining whether GHG emissions will significantly affect the environment when there is neither federal guidance nor an accepted scientific consensus on these matters.[150] This inability to find an acceptable methodology is not for a lack of trying. The Commission

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[148] 42 U.S.C. § 7411(b)(1)(A) (2018).

[149] *Id.* § 7411(b)(1)(B).

[150] The Council on Environmental Quality's 2019 Draft Greenhouse Gas Guidance states, "[a]gencies need not undertake new research or analysis of potential climate effects and may rely on available information and relevant scientific literature." CEQ, *Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions*, 84 Fed. Reg. 30,097, 30,098 (June 26, 2019); *see also* CEQ FINAL GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND THE EFFECTS OF CLIMATE CHANGE IN NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS at 22 (Aug. 1, 2016) ("agencies need not undertake new research or analysis of potential climate change impacts in the proposed action area, but may instead summarize and incorporate by reference the relevant scientific literature"), https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf.

reviews the climate science, state and national targets, and climate models that could inform its decision-making.[151]

76. Moreover, assessing the significance of project effects on climate change is unlike the Commission's determination of ROE. Establishing ROE has been one of the core functions of the Commission since its inception under the FPA as the Federal Power Commission.[152] And, setting ROE has been an activity of state public utility commissions, even before the creation of the Federal Power Commission.[153] The Commission's methodology is also founded in established economic theory.[154] In contrast, assessing the significance of GHG emissions is not one of the Commission's core missions and there is no suitable methodology for making such determination.

77. It has been argued that the Commission can establish its own methodology for determining significance, pointing out that the Commission has determined the significance of effects on vegetation, wildlife, and open land using its own expertise and without generally accepted significance criteria or a standard methodology.

78. I disagree. As an initial matter, it is important to note that when the Commission states it has no suitable methodology for determining the significance of GHG emissions, the Commission means that it has no objective basis for making such finding. The Commission's findings regarding significance for vegetation, wildlife, and open land have an objective basis. For example for vegetation, the Commission determined the existing vegetation in the project area by using information made available by the U.S. Forest Service, U.S. Bureau of Land Management, Oregon Department of Fish and Wildlife, and Oregon Natural Heritage Program.[155] The Commission determined the project's effect on vegetation by considering the existing vegetation, by using the

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[151] *Fla. Se. Connection, LLC*, 162 FERC ¶ 61,233, at P 36; *see also WildEarth Guardians*, 738 F.3d 298, 309 (D.C. Cir. 2013) ("Because current science does not allow for the specificity demanded by the Appellants, the BLM was not required to identify specific effects on the climate in order to prepare an adequate EIS.").

[152] *Hope*, 320 U.S. 591 (1944); *FPC v. Nat. Gas Pipeline Co. of America*, 315 U.S. 575 (1942).

[153] *See, e.g., Willcox v. Consol. Gas Co.*, 212 U.S. 19, 41 (1909) (finding New York State must provide "a fair return upon the reasonable value of the property at the time it is being used for the public.").

[154] *Inquiry Regarding the Commission's Policy for Determining Return on Equity*, 166 FERC ¶ 61,207 (2019) (describing the Commission's use of the Discounted Cash Flow model that was originally developed in the 1950s as a method for investors to estimate the value of securities).

[155] Final EIS at 4-150 to 4-155, 4-163 to 4-165.

applicant's materials to quantify the amount of acres that will be temporarily impacted by construction and permanently impacted by operation, and by considering the mitigation and restoration activities that Jordan Cove and Pacific Connector will implement, including *BLM and Forest Service Compensatory Mitigation Plan and Amendment*, *Late Successional Reserves Crossed by the PGCP Project*, and planting of Douglas firs.[156] Based on this information demonstrating that affected vegetation is widespread in the vicinity of the project and the measures that the applicants will implement, the Commission made a reasoned finding that the Project's impacts on vegetation will not be significant. The Commission conducted a similar evaluation of wildlife and open land.

79. In contrast, the Commission has no reasoned basis 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 and compare that number to national emissions to calculate a percentage of national emissions. That calculated 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. Nor are there acceptable scientific models that the Commission may use to attribute every ton of GHG emissions to a physical climate change effect.

80. Without adequate support or a reasoned target, the Commission cannot ascribe significance to particular amounts of GHG emissions. To do so would not only exceed our agency's authority, but would risk reversal upon judicial review. Courts require agencies to "consider[] the relevant factors and articulate[] a rational connection between the facts found and the choice made."[157] Simply put, stating that an amount of GHG emissions appears significant without any objective support fails to meet the agency's obligations under the Administrative Procedure Act (APA).

## V. Conclusion

81. As in other cases, I have carefully considered the facts, record and the law.[158] Under the NGA, the Commission considers local and state interests, but ultimately is

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[156] *Id.* 4-156 to 4-158, 4-165 to 4-173.

[157] *City of Tacoma v. FERC*, 460 F.3d 53, 76 (D.C Cir. 2006) (quoting *Ariz. Cattle Growers' Ass'n v. FWS*, 273 F.3d 1229, 1235-36 (9th Cir. 2001)); *see also American Rivers v. FERC*, 895 F.3d 32, 51 (D.C. Cir. 2018) (". . . the Commission's NEPA analysis was woefully light on reliable data and reasoned analysis and heavy on unsubstantiated inferences and *non sequiturs*") (italics in original); *Found. for N. Am. Wild Sheep v. U.S. Dep't of Agr.*, 681 F.2d 1172, 1179 (9th Cir. 1982) ("The EA provides no foundation for the inference that a valid comparison may be drawn between the sheep's reaction to hikers and their reaction to large, noisy ten-wheel ore trucks.").

[158] The views of the State of Oregon are particularly important and I have considered the letter issued by Oregon DLCD. As discussed in the order, the issues

required to consider the national interest when making its final determination. I fully support the Commission's order that the LNG Project is not inconsistent with the public interest and that the pipeline is required by the public convenience and necessity.

82. This concurrence is intended to assist the Commission, courts, and other parties in their consideration of the Commission's obligations under the NGA and NEPA. The Commission cannot act *ultra vires* and claim more authority than the NGA provides it, regardless of the importance of the issue sought to be addressed.[159] The NGA provides the Commission no authority to deny a certificate application based on the environmental effects from upstream gas production. Congress enacted the NGA, and subsequent legislation, to ensure the Commission provided public access to natural gas. Further, Congress designed the NGA to preserve States' authority to regulate the physical effects from upstream gas production, and did not leave that field unregulated. Congress simply did not authorize the Commission to judge whether upstream production will be too environmentally harmful.

83. Nor does the Commission have the ability to establish measures to mitigate GHG emissions. Pursuant to the Clean Air Act, Congress exclusively assigned that authority to the EPA and the States. Finally, the Commission has no objective basis for determining whether GHG emissions are significant that would satisfy the Commission's APA obligations and survive judicial review.

84. I recognize that some believe the Commission should do more to address climate change. The Commission, an energy agency with a limited statutory authority, is not the appropriate authority to establish a new regulatory regime.

For these reasons, I respectfully concur.

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Bernard L. McNamee
Commissioner

raised were already considered in the EIS or specifically addressed in the order. *Jordan Cove Energy Project L.P.*, 170 FERC ¶ 61,202 at P 156.

[159] *Office of Consumers' Counsel*, 655 F.2d at 1152 ("[A]ppropriate respect for legislative authority requires regulatory agencies to refrain from the temptation to stretch their jurisdiction to decide questions of competing public priorities whose resolution properly lies with Congress.").

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## CERTIFICATE OF SERVICE

Pursuant to Federal Rules of Appellate Procedure 15(c), I hereby certify that on July 2, 2020, I caused to be served copies of the foregoing Second Amended Petition for Review and Exhibits via electronic mail to all parties on the Federal Energy Regulatory Commission's service list in the underlying proceedings, Docket Nos CP17-494 and CP17-495, as listed in Exhibit D.

I further certify that on July 2, 2020, I caused to be served copies of the foregoing Second Amended Petition for Review and Exhibits by certified first-class mail, postage prepaid to the following addresses:

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