

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.
Pacific Connector Gas Pipeline, LP

Docket Nos. CP17-495-000
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 regulations² 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 regulations⁴ 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 NGA⁶ 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 (m³) 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 m³ to 217,000 m³. 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 m³ 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

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.

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.

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

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

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

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 Tienison’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 (Tienison’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 2005⁶² 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

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

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

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

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

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

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

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

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. EFG¹²⁵ states that it submitted two bids¹²⁶ 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

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 bidders¹³⁸ 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,

¹³⁶ Pacific Connector and Jordan Cove’s November 13, 2017 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.

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

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

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

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

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

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

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 Tienison'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

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

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

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

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 *Cf. 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 regulations²¹⁰ 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 regulations²¹¹ 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.

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.

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 Statement²¹⁸ 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

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.

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 regulations²²⁷ 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

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.

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

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

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.

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").

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 file 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

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

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 sessions²⁶³ 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 letters²⁶⁵ 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 errors²⁷⁴ 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

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 information²⁸⁵ 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

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.

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 *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. Lifecycle 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 agree the Commission must also analyze indirect impacts associated with upstream production and downstream end use.²⁹⁷

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

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

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

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

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 effects³²⁵ 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

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 CO₂ 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

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

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. Env'tl. 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

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

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. & Env'tl. Control v. FERC*, 558 F.3d 575, 578-79 (D.C. Cir. 2009) (holding Delaware suffered no concrete injury from the Commission's conditional approval of a natural gas terminal construction despite statutes requiring states' prior approval because the Commission conditioned its approval of construction on the states' prior approval); *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

(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

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

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

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 Kentucky 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

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 Kentucky Slough Wetland Mitigation Project (Kentucky 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 Kentucky project consists of 140 acres on the eastern shore of Coos Bay at the mouth of Kentucky Slough. The property was formerly the Kentucky 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 site⁴²⁵ 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,

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

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

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

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,

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.

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

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

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

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.

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,

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

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

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

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 within 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 (CO₂e).⁵⁵³ To provide context to the direct and indirect⁵⁵⁴ GHG estimate, according to the national net CO₂e emissions estimate in the EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks* (2019), 5.743 billion metric tonnes of CO₂e were emitted at the national level in 2017 (inclusive of CO₂e sources and sinks).⁵⁵⁵ The operational emissions of these facilities could potentially increase annual CO₂e 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

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. CO₂e 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 CO₂e); 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 CO₂e).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 CO₂e emissions of about 2.14 million metric tonnes of CO₂e. 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

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

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

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

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.

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.

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/ft²-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

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

Docket Nos. CP17-495-000
CP17-494-000

(Issued March 19, 2020)

GLICK, Commissioner, *dissenting*:

1. I dissent from today's order because it violates both the Natural Gas Act¹ (NGA) and the National Environmental Policy Act² (NEPA). Rather than wrestling with the Project's³ significant adverse impacts, today's order makes clear that the Commission will not allow these impacts to get in the way of its outcome-oriented desire to approve the Project.⁴

2. As an initial matter, the Commission 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

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.

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 change¹⁶ 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

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.

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 area²⁶ 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.

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

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

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 CO₂ emitted . . . , it does not evaluate the 'incremental impact' that these emissions will have on climate change or on the environment more generally."); *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 995 (9th Cir. 2004) ("A calculation of the total number of acres to be harvested in the watershed is a necessary component . . . , but it is not a sufficient description of the actual environmental effects that can be expected from logging those acres.").

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

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

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

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 Commission uses its broad conditioning authority under section 3 and section 7 of the NGA⁵³ 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

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.

Richard Glick
Commissioner

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

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

Docket Nos. CP17-495-000
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

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,

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 Framers' 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

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 cumulative²² 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

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.

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

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

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 Commission⁴⁷ 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

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 Env’tl. 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

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,

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:

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

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 use⁶⁴ 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

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

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

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.

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

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

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]

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 (EPA 1992), Congress also expressed a preference for providing the public access to natural gas. EPA 1992 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 EPA 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

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

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

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

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

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.

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

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

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.pdf><https://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

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 Carbon¹⁴⁰ 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.

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 CO₂ 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.

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

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

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

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.

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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