167 FERC ¶ 61,110
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Transcontinental Gas Pipe Line Company, LLC Docket No. CP17-101-000

ORDER ISSUING CERTIFICATE

(Issued May 3, 2019)

1. On March 27, 2017, Transcontinental Gas Pipe Line Company, LLC (Transco) filed an application pursuant to section 7(c) of the Natural Gas Act (NGA)[1] and Part 157 of the Commission's regulations[2] for authorization to construct and operate an expansion of Transco's system in Pennsylvania and New Jersey and its offshore pipeline system in New Jersey and New York state waters (Northeast Supply Enhancement Project). The Northeast Supply Enhancement Project is designed to provide up to 400,000 dekatherms per day (Dth/d) of additional firm transportation service.

2. For the reasons discussed below, we will grant the requested authorizations, subject to the conditions described herein.

I. Background and Proposal

3. Transco is a limited liability company organized and existing under the laws of the State of Delaware. Transco is a natural gas company as defined by section 2(6) of the NGA[3] engaged in the transportation of natural gas in interstate commerce and subject to the Commission's jurisdiction. Transco's transmission system extends from Texas, Louisiana, and the offshore Gulf of Mexico area, through Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, Maryland, Pennsylvania, and New Jersey, to its termini in the metropolitan New York City area.

4. Transco proposes to construct and operate its Northeast Supply Enhancement Project to provide up to 400,000 Dth/d of incremental firm transportation service from its

[1] 15 U.S.C. § 717f(c) (2012).

[2] 18 C.F.R. pt. 157 (2018).

[3] 15 U.S.C. § 717a(6).

Compressor Station 195 in York County, Pennsylvania, to its offshore Rockaway Transfer Point, an existing interconnection between Transco's Lower New York Bay Lateral and its Rockaway Delivery Lateral in New York State waters. To facilitate this service, Transco proposes to construct and operate the following facilities:

- Approximately 10.2 miles of 42-inch-diameter onshore pipeline loop located in Lancaster County, Pennsylvania (Quarryville Loop);
- Approximately 3.4 miles of 26-inch-diameter onshore pipeline loop in Middlesex County, New Jersey (Madison Loop);
- Approximately 0.2 miles of 26-inch-diameter onshore pipeline loop in Middlesex County, New Jersey, and approximately 23.3 miles of 26-inch-diameter offshore pipeline loop in Middlesex and Monmouth Counties, New Jersey, and Queens and Richmond Counties, New York (Raritan Bay Loop);[4]
- A new 21,902 horsepower (hp) electric motor-driven compression unit located at its existing Compressor Station 200 in Chester County, Pennsylvania;
- A new 32,000 hp natural gas-fired, turbine-driven compressor station consisting of two approximately 16,000 hp turbine units (Compressor Station 206) in Somerset County, New Jersey; and
- Various ancillary facilities including a communication tower, mainline valves, launchers and receivers, and other aboveground and underground facilities.

Transco estimates the cost of the Northeast Supply Enhancement Project to be approximately $926.5 million.

5. Transco states that it held an open season from May 16 through June 9, 2016, for the Northeast Supply Enhancement Project. As a result of the open season, Transco executed binding precedent agreements for the entire 400,000 Dth/d of transportation service created by the Northeast Supply Enhancement Project with two affiliates of National Grid. Specifically, Transco executed a binding precedent agreement with The Brooklyn Union Gas Company, d/b/a National Grid NY for 211,300 Dth/d for a term of 15 years. Additionally, Transco executed a binding precedent agreement with KeySpan Gas East Corporation d/b/a National Grid for 188,700 Dth/d for a term of 15 years.

[4] The offshore portion of the Raritan Bay Loop will cross approximately 6.0 miles of New Jersey State waters and approximately 17.3 miles of New York State waters.

Transco also states that it held a reverse open season from November 30 through December 16, 2016, and no requests to participate were received. Transco states that each of the project shippers elected to pay a negotiated rate.

6. Transco proposes to establish incremental firm recourse rates under Rate Schedule FT and to apply its generally applicable system fuel retention and electric power rates for service on the Northeast Supply Enhancement Project.

II. Notice, Interventions, and Comments

7. Notice of Transco's application was published in the *Federal Register* on April 12, 2017.[5] Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.[6] Late interventions were granted by notices issued on April 19 and December 31, 2018.

8. In addition, numerous entities, including landowners and individuals, filed comments raising concerns over the environmental impacts of the project. These comments are addressed in the Final Environmental Impact Statement (EIS) and, as appropriate, below.

Request for Formal Hearing

9. The Stony Brook-Millstone Watershed Association (Stony Brook) requests a formal hearing of Transco's application for the Northeast Supply Enhancement Project that would address the "environmental impacts of and public need for the project."[7] Stony Brook does not provide any additional information regarding its request for a formal hearing.

10. An evidentiary, trial-type hearing is necessary only where there are material issues of fact in dispute that cannot be resolved on the basis of the written record.[8] Stony Brook has not raised a material issue of fact that the Commission cannot resolve on the basis of the written record. As demonstrated by the discussion below, the existing written record provides a sufficient basis to resolve the issues relevant to this proceeding. The Commission has satisfied the hearing requirement by giving all interested parties a

[5] 82 Fed. Reg. 17,651 (2017).

[6] 18 C.F.R. § 385.214(c)(1) (2018).

[7] *See* Stony Brook's April 27, 2017 Motion to Intervene.

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

full and complete opportunity to participate through evidentiary submission in written form.[9] Therefore, we will deny Stony Brook's request for a formal hearing.

III. Discussion

11. Because the proposed 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 subsections (c) and (e) of the NGA.

A. Application of the Certificate Policy Statement

12. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.[10] 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 new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

13. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from 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, or landowners and communities affected by the proposed route or location of the new pipeline 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 complete the environmental analysis where other interests are considered.

---

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

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

14. With respect to the subsidization threshold requirement, the Commission has determined, in general, that when a pipeline proposes an incremental rate for service utilizing proposed expansion capacity that is higher than the generally applicable system rate, the pipeline satisfies the threshold requirement that the project will not be subsidized by existing customers.[11] As noted above, Transco has proposed an incremental recourse rate to recover the costs of the project and that rate is higher than its existing applicable system recourse rate.

15. We find that the proposed project will have no adverse effect on service to Transco's existing customers because the proposed expansion facilities are designed to provide incremental service to meet the needs of the project shippers, without degrading service to Transco's existing customers. We also find that there will be no adverse impact on other pipelines in the region or their captive customers, and no other pipelines or their captive customers have filed adverse comments regarding Transco's proposal.

16. We find that Transco has sufficiently demonstrated that there is market demand for the project. Transco has entered into long-term precedent agreements for firm service with the project shippers for the full amount of additional firm transportation service to be made possible by the project. Moreover, Ordering Paragraph (B)(4) of this order requires that Transco file a written statement affirming that it has executed contracts for service at the levels provided for in their precedent agreements prior to commencing construction.

17. We are further satisfied that Transco has taken appropriate steps to minimize adverse impacts on landowners. As discussed in greater detail in the final EIS and, as appropriate, below, the onshore portion of Transco's proposed project will disturb approximately 332 acres of land during construction, and approximately 60 acres of land during operation. Transco participated in the Commission's pre-filing process and has actively worked with local stakeholders, including homeowners and landowners, as well as federal and state agencies to develop the proposed pipeline route, as well as evaluating 39 sites for the placement of Compressor Station 206. Transco proposes to co-locate approximately 97 percent of the Quarryville Loop within and alongside the existing Transco Mainline right-of-way, and 100 percent of the Madison Loop within and alongside the existing Transco Lower Bay Loop C right-of-way. Co-locating the pipelines will allow approximately 91 percent of the Quarryville Loop right-of-way to overlap with Transco's existing right-of-way by at least 35 feet, and allow approximately

[11] *See, e.g.*, *Dominion Transmission, Inc.*, 155 FERC ¶ 61,106, at P 15 (2016); *Transcontinental Gas Pipe Line Corp.*, 98 FERC ¶ 61,155, at 61,552 (2002).

74 percent of Madison Loop right-of-way to overlap with Transco's existing right-of-way by at least 20 feet.[12]

18. Based on the benefits the project will provide and the minimal adverse impacts on existing shippers, other pipelines and their captive customers, and landowners and surrounding communities, we find, consistent with the Certificate Policy Statement and NGA section 7(c), that the public convenience and necessity requires approval of the project, subject to the environmental and other conditions in this order.

B. Rates

1. Recourse Rate

19. Transco proposes to establish initial incremental firm recourse rates under Rate Schedule FT for firm service using the incremental capacity created by the project facilities. Specifically, Transco proposes an initial incremental daily recourse reservation charge of $1.21655 per Dth and an incremental usage charge of $0.00500 per Dth. The proposed recourse reservation charge is based on a Year 1 cost of service of $177,616,659 and annual billing determinants of 146,000,000 Dth.[13] The proposed cost of service reflects Transco's onshore and offshore transmission depreciation rates of 2.61 percent and 1.20 percent, respectively (both including negative salvage), and a depreciation rate of 4.97 percent for turbines. The depreciation rates were approved in Transco's general rate case settlement in Docket No. RP12-993-000.[14] Transco also proposes to use a pre-tax rate of return of 15.34 percent, which was utilized in Transco's approved settlement rates in Docket Nos. RP01-245-000, et al.[15]

[12] *See* Resource Report 1 of Transco's Application.

[13] Exhibit P, Page 1 of 2. The annual billing determinants are equal to the maximum daily capacity of the project, times 365.

[14] *Transcontinental Gas Pipe Line Co., LLC,* 145 FERC ¶ 61,205 (2013).

[15] *Transcontinental Gas Pipe Line Corp.*, 100 FERC ¶ 61,085 (2002). Transco explains that it has used the specified pre-tax rate of return underlying the Docket No. RP01-245 settlement rates because the more recent Docket No. RP12-993 settlement agreement was a "black box" settlement, which does not specify a rate of return.

20. In a January 26, 2018 response to a staff data request, Transco provided an adjusted cost of service and recalculated its initial incremental rates to reflect changes in the federal tax code as per the Tax Cuts and Jobs Act of 2017,[16] which became effective January 2018. Transco's work papers show that the effect of the tax code change is a reduction in the estimated cost of service to $164,972,434, a reduction in the initial incremental daily recourse reservation charge to $1.12995 per Dth and no change to the initial incremental usage charge of $0.00500 per Dth. As Transco's January 26, 2018 calculation reflects the federal tax code that will be in effect when the project goes into service, the Commission finds it appropriate to use the revised incremental rates for the purpose of establishing the initial incremental rates.

21. Consistent with the D.C. Circuit's holding in *United Airlines*,[17] the Commission has held that a double recovery of income tax costs results from granting a Master Limited Partnership (MLP) a separate income tax allowance and a pre-tax return on equity.[18] Accordingly, the Commission has established a policy that MLPs are generally not permitted to recover an income tax allowance in their cost of service. For those pass-through business forms that are not MLPs, the Commission continues to consider how to resolve the double recovery concern raised by *United Airlines*.[19] However, the Commission has clarified that a natural gas company organized as a pass-through entity, all of whose income or losses are consolidated on the federal income tax return of its corporate parent, is considered to be subject to the federal corporate income tax, and is thus eligible for a tax allowance.[20]

---

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

[17] *United Airlines, Inc. v. FERC*, 827 F.3d 122, 134, 136 (D.C. Cir. 2016) (*United Airlines*).

[18] *SFPP, L.P.*, Opinion No. 511-C, 162 FERC ¶ 61,228, at PP 21-30 (2018); *Enable Mississippi River Transmission, LLC*, 164 FERC ¶ 61,075, at PP 34-35 (2018) (*Enable*); *see also Inquiry Regarding the Commission's Policy for Recovery of Income Tax Costs*, 162 FERC ¶ 61,227 (Revised Policy Statement) (providing guidance that an MLP may not recover an income tax allowance), *order on reh'g*, 164 FERC ¶ 61,030 (2018).

[19] Revised Policy Statement, 162 FERC ¶ 61,227 at PP 3, 45; *Trailblazer Pipeline Co., LLC*, 164 FERC ¶ 61,074, at PP 30-31 (2018) (*Trailblazer*).

[20] *See Enable*, 164 FERC ¶ 61,075 at PP 34-35; *BP West Coast Products, LLC v. FERC*, 374 F.3d 1263, 1289 (D.C. Cir. 2004) (disallowing an income tax allowance for an MLP's corporate unitholders, while explaining that an income tax allowance is appropriate in the cost of service of a pass-through subsidiary of a corporation "when

22. On August 31, 2018, Transco filed a general NGA section 4 rate case in Docket No. RP18-1126-000, in which Transco states that due to a "recently completed transaction" it became a wholly-owned subsidiary of the Williams Companies, Inc. (Williams). As such, Transco asserts that it is a member of a consolidated corporate return group under Williams and is permitted an income tax allowance on a stand-alone basis under Commission policy.[21] In addition, in a November 20, 2018 response in compliance with a Commission order,[22] Transco filed a written statement clarifying that Williams, a publicly traded Delaware corporation, and Williams Partners L.P. completed their merger on August 10, 2018, with Williams continuing as the surviving entity. Transco again stated that it is now indirectly owned by Williams and is a member of a consolidated corporate return group for federal income tax purposes. Therefore, Transco states that it is appropriate to include an income tax allowance in the rates for its projects.

23. Because Williams has completed the merger described above, and Transco's rates are subject to an ongoing general NGA section 4 rate case, we accept Transco's proposal to include the income tax allowance in its cost of service subject to the resolution of its rate case. To the extent Transco's rate case is resolved and results in a determination that Transco is not eligible to include an income tax allowance in its rates before it files actual tariff records setting forth the initial rates for service, those records must reflect rates recalculated to remove the proposed income tax allowance and accumulated deferred income taxes (ADIT) from its cost of service. If Transco fails to remove the proposed income tax allowance and ADIT from the initial rates, then that filing will be rejected as not being in compliance with this order, and Transco will be required to refile those

---

such a subsidiary does not itself incur a tax liability but generates one that might appear on a consolidated return of the cosuch a subsidiary does not itself incur a tax liability but generates one that might appear on a consolidated return of the corporate group."); *see also Interstate and Intrastate Natural Gas Pipelines; Rate Changes Relating to Federal Income Tax Rate*, Order No. 849, 83 Fed. Reg. 36,672 (July 30, 2018), 164 FERC ¶ 61,031, at P 3 (2018) (Order No. 849) (clarifying that for purposes of the FERC Form No. 501-G and limited NGA section 4 filings contemplated by the final rule "a natural gas company organized as a pass-through entity all of whose income or losses are consolidated on the federal income tax return of its corporate parent is considered to be subject to the federal corporate income tax, and is thus eligible for a tax allowance.").

[21] *See* Page 3 of Transco's Transmittal Sheet in Docket No. RP18-1126-000 (citing Order No. 849, 164 FERC ¶ 61,031, at P 56).

[22] *Transcontinental Gas Pipe Line Co., LLC,* 165 FERC ¶ 61,154, at P 13 (2018).

records with the appropriate rates and receive Commission approval prior to going into service.

24. The Commission has reviewed Transco's proposed cost of service and initial incremental rates, as modified in its January 26, 2018 data response, and generally finds them reasonable. Under the Commission's Certificate Policy Statement, there is a presumption that incremental rates should be charged for proposed expansion capacity if the incremental rate exceeds the maximum system recourse rate.[23] Hence, the Commission will approve Transco's revised incremental rates for the project because the 100 percent load factor incremental rate (the sum of the reservation and commodity charges) of $1.13495 per Dth is higher than the currently applicable Rate Schedule FT Zone 6-6 100 percent load factor rate of $0.1716 per Dth.[24]

2. Fuel

25. Transco proposes to apply its generally applicable system fuel retention and electric power rates to the project. Transco submitted a fuel study that shows that the project is expected to result in an overall reduction in fuel use attributable to existing customers.[25] Thus, Transco states the fuel benefit provided by the project to existing Transco shippers supports Transco's proposal to assess the project shippers the generally applicable fuel retention and electric power charges under Rate Schedule FT.[26] Based on the project reduction in fuel use for existing customers, the Commission approves Transco's proposal to charge its generally applicable system fuel and electric power rates for transportation on the capacity associated with the project facilities.

3. Reporting Incremental Costs

26. Section 154.309 of the Commission's regulations includes bookkeeping and accounting requirements applicable to all expansions for which incremental rates are charged. The requirements ensure that costs are properly allocated between pipelines' existing shippers and incremental expansion shippers.[27] Therefore, Transco must keep

---

[23] Certificate Policy Statement, 88 FERC at 61,746.

[24] Transcontinental Gas Pipe Line Company; FERC NGA Gas Tariff; Fifth Revised Volume No. 1, Section 1.1.1, FT - Non-Incremental Rates, 20.0.0.

[25] *See* Transco's Application, Exhibit Z-1, at 1-2.

[26] *See* Transco's Application at 8.

[27] 18 C.F.R. § 154.309 (2018).

separate books and accounting of costs and revenues attributable to the project, as required by section 154.309 of the Commission's regulations. The books should be maintained with applicable cross-references as required by section 154.309. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 rate case, and the information must be provided consistent with Order No. 710.[28]

4. Negotiated Rates

27. Transco proposes to provide service to its project shippers under negotiated rate agreements. Transco must file either negotiated rate agreements or tariff records setting forth the essential elements of the agreements in accordance with the Alternative Rate Policy Statement[29] and the Commission's negotiated rate policies.[30] Transco must file the negotiated rate agreements or tariff records at least 30 days, but no more than 60 days, before the proposed effective date for such rates.[31]

---

[28] *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, 122 FERC ¶ 61,262, at P 23 (2008).

[29] *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*, 75 FERC ¶ 61,024, *reh'g denied,* 75 FERC ¶ 61,066 (1996), *petition for review denied sub nom. Burlington Resources Oil & Gas Co. v. FERC,* 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement).

[30] *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, *dismissing reh'g and denying clarification,* 114 FERC ¶ 61,304 (2006).

[31] 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. *See, e.g. Texas Eastern Transmission, LP,* 149 FERC ¶ 61,198, at P 33 (2014). 18 C.F.R. § 154.112(b).

C. Environmental Analysis

28. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),[32] Commission staff evaluated the potential environmental impacts of the proposed project in an EIS. On March 23, 2018, Commission staff issued the draft EIS addressing issues raised up to the point of publication. Notice of the draft EIS was published in the Federal Register on March 30, 2018, establishing a 45-day public comment period ending on May 14, 2018.[33] Commission staff held public comment sessions on April 25 and 26, 2018 and May 2 and 3, 2018, to receive comments on the draft EIS. We also received over 2,000 written comment letters from federal, state, and local agencies; Native American tribes; various companies and organizations; and individuals in response to the draft EIS. The transcripts of the public comment sessions and all written comments on the draft EIS are part of the public record for the project.

29. On January 25, 2019, Commission staff issued the final EIS for the project, and public notice of the availability of the final EIS was published in the Federal Register on February 1, 2019.[34] 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; cultural resources; air quality and noise; safety; cumulative impacts; and alternatives. The final EIS also addresses all substantive environmental comments received on the draft EIS.[35] The final EIS concludes that construction and operation of the project will result in some adverse environmental impacts, but impacts will be reduced to less-than-significant levels with the implementation of Transco's proposed, and Commission staff's recommended mitigation measures, which are included as conditions to this order, as discussed below. Environmental issues of concern, including impacts from the construction and operation of Compressor Station 206 and the impacts to aquatic resources from construction of the Raritan Bay Loop, as well any substantive comments on the final EIS, are discussed below.

1. Compressor Station 206

30. The majority of commenters expressed concerns regarding the impacts of Compressor Station 206. Compressor Station 206 would occupy about 16.1 acres within a

---

[32] 42 U.S.C. §§ 4321 *et seq.* (2012). *See also* the Commission's NEPA-implementing regulations at Title 18 of the Code of Federal Regulations, Part 380.

[33] 83 Fed. Reg. 13,741.

[34] 84 Fed. Reg. 1,119.

[35] Final EIS at 1-9 and Appendix M.

52.1-acre parcel that Transco has acquired to provide a buffer from surrounding land uses. The compressor building (which would house the compressor units and be the primary source of noise and air emissions) would be 2,500 feet from the nearest residence, 2,530 feet from the nearest place of worship (the New Jersey Buddhist Vihara Meditation Center (Meditation Center)), 6,300 feet from the nearest school or daycare center, and 2,100 feet from the nearest face of the Trap Rock quarry. The concerns raised centered on public safety; public health impacts from air emissions; operational noise and visual impacts (particularly on the Meditation Center); impacts on property values; the potential to encounter or exacerbate existing groundwater contamination associated with the adjacent Higgins Farm Superfund site; and alternatives.

a. Public Safety

31. Numerous commenters raised concerns regarding the potential for blasting-induced vibrations from the Trap Rock Quarry to damage the compressor station and Transco's existing pipelines in the area, as well as whether local fire departments would have sufficient resources to protect the public in the event of a fire at the compressor station. Regarding vibration impacts, Transco committed to incorporate safety factors in the final foundation designs, including a vibration monitoring sytem featuring 16 vibration monitors that would shut the unit down in the event of excessive vibration, to prevent displacement if future blast intensity increases.[36] Environmental Condition 30 further requires that Transco file its final foundation designs prior to construction. The final EIS concludes that Compressor Station 206 would be adequately protected from blasting at Trap Rock quarry, and that such blasting does not pose a safety concern to Transco's existing pipeline system. We agree with this conclusion.

32. In the event of a fire, Compressor Station 206 will include safety features including an automated system to quickly isolate gas piping, stop equipment, and safely vent station gas.[37] Transco states that its automated emergency shutdown system would provide the most effective way to begin to address an emergency and that no fire hydrant will be necessary to address a fire at the site. Transco will also plan for emergency response with local fire, police, and public officials in accordance with DOT requirements.[38] The Pipeline and Hazardous Materials Safety Administration (PHMSA) of the DOT is responsible for ensuring the safe operation of interstate natural gas

[36] Final EIS at ES-4 – ES-5.

[37] Final EIS at 4-337.

[38] Final EIS at 5-24.

pipelines through its regulations under Part 192 of the Code of Federal Regulations.[39] Transco must comply with these regulations and further, as required by 157.14(a)(10)(vi) of the Commission's regulations, Transco has certified that it would design, install, inspect, test, construct, operate, replace, and maintain the project facilities in accordance with modern engineering practices that meet or exceed the DOT's Minimum Federal Safety Standards.[40]

b. Operating Emissions

33. Many stakeholders asserted that existing state and federal air quality regulations are not protective of public health and recommended that a health impact assessment be conducted for Compressor Station 206.

34. The final EIS explains that ambient air quality is protected by federal and state regulations. Under the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) to protect human health and public welfare. These standards incorporate short-term (hourly or daily) levels and long-term (annual) levels to address acute and chronic exposures to pollutants.[41] The NAAQS include primary standards that are designed to protect human health, including the health of sensitive individuals such as children, the elderly, and those with chronic respiratory problems. Air emission modeling conducted in accordance with EPA and New Jersey Department of Environmental Protection (DEP) guidelines indicates that Compressor Station 206 would be a minor source of air emissions under the CAA Title V Operating Permit program, would meet the NAAQS, and would not contribute to an exceedance of the NAAQS.[42] The New Jersey DEP issued Transco a permit to construct and operate Compressor Station 206 on September 7, 2017 and Transco has committed to comply with all applicable permit requirements, including for monitoring and reporting. The final EIS concludes that construction and operation of the project would not have a significant impact on air quality and that a health impact assessment of Compressor Station 206 is not warranted.[43] We agree with this conclusion.

[39] 49 C.F.R. pt. 192 (2018).

[40] Final EIS at 4-326.

[41] Final EIS at ES-5.

[42] Final EIS at ES-6.

[43] Final EIS at 4-313.

c. Operational Noise

35. Commenters expressed concern regarding noise from operation of Compressor Station 206. As described in the final EIS, ambient noise measurements at the nearest noise sensitive areas (NSAs) to Compressor Station 206 were used to estimate the noise that would result from normal operation of the compressor station. Based on modeling, the estimated noise increase associated with Compressor Station 206 will be below the threshold of perception for the human ear at the nearest NSAs, including the Meditation Center.[44] The estimated operational noise at the nearest point on the Meditation Center's planned meditation trail would be 46.8 decibels on the A-weighted scale (dBA) day-night sound level (Ldn), which would comply with our operating noise requirement at NSAs of 55 dBA L_{dn}.[45] To verify predicted operating noise levels, Environmental Condition 29 requires that Transco file a noise survey after placing Compressor Station 206 in service. Environmental Condition 28 further mandates that if the noise attributable to the operation of all of the equipment at the station under interim or full horsepower load exceeds 55 dBA L_{dn} at any nearby NSA, Transco will be required to install additional noise controls to meet the level.

36. Noise will also occur during occasional venting (blowdown) of natural gas for annual emergency shut-down system testing and during maintenance activities. Venting could also occur in the unlikely event of an emergency at the compressor station.[46] Transco will install silencers on the blowdown vents to reduce the associated noise to 60 dBA at a distance of 300 feet during planned blowdowns, although the blowdown associated with required annual testing may not be silenced. Although certain blowdown events may be audible in proximity to the compressor station, the noise would be periodic and short-term, and will diminish with distance from the station, and in nearly all cases, area landowners will have advance notice of the event.[47] Therefore, the final EIS concludes that operation of Compressor Station 206 will not result in significant noise impacts at nearby NSAs.[48] We agree with this conclusion.

---

[44] Ambient noise was measured at the Samadhi Buddha statue and was combined with the estimated station operating noise. Final EIS at 4-224, 238.

[45] Final EIS at ES-8.

[46] Final EIS at ES-7.

[47] *Id.*

[48] Final EIS at ES-7.

d. Visual Impacts

37. Concerns were raised regarding the visual impacts of Compressor Station 206. As explained in the final EIS, Compressor Station 206 will be centrally located on a 52.1-acre wooded parcel and a wooded buffer will be preserved around the station.[49] Visual simulations were conducted from two locations where the facility could potentially be visible for both summer (foliage) and winter (no foliage) months. At both viewpoints and for both seasonal scenarios, Compressor Station 206 will not be visible, nor will it be visible from the Meditation Center.[50] Therefore, the final EIS concludes that Compressor Station 206 will not result in a significant visual impact in the area. We agree.

e. Property Values

38. Numerous landowners were concerned about the impacts the project, specifically Compressor Station 206, could potentially have on their properties. Commission staff reviewed studies that evaluate the impact of energy infrastructure facilities on surrounding property values. The final EIS ultimately determined that there was no conclusive evidence indicating that compressor stations have a significant negative impact on property values. Accordingly, we conclude here, as we have in other cases, that the proposed project is not likely to significantly impact property values in the project area.[51]

f. Groundwater

39. Several commenters expressed concern regarding the impacts construction of the project may have on EPA's groundwater remediation efforts at the Higgins Farm Superfund site. Higgins Farm is adjacent to the Compressor Station 206 site and, as described in the final EIS, EPA continues to remediate and monitor contaminated groundwater emanating from the site.[52] The EPA expects contaminant concentrations to continue to decline, but states that continued evaluation is necessary to confirm contaminant concentration reduction and the downgradient extent of contamination.

---

[49] Final EIS at ES-7 – ES-8.

[50] Final EIS at ES-8.

[51] *Transcontinental Gas Pipe Line Co., LLC*, 158 FERC ¶ 61,125, at P 106 (2017); *Mountain Valley Pipeline, LLC,* 161 FERC ¶ 61,043, at P 228 (2017).

[52] Final EIS at 4-30.

40. Perchloroethylene is one of the primary contaminants of concern at the Higgins Farm Superfund site. Data indicates that the perchloroethylene plume is about 850 feet from the proposed compressor building, and that the affected groundwater unit occurs about 30 feet below the proposed facility.[53] As stated in the final EIS, EPA concluded that construction and operation of Compressor Station 206 is unlikely to affect EPA's ongoing cleanup operations at the site.[54] We agree with this conclusion.

g. Alternatives

41. Commenters suggested that alternatives existed that would negate the need for Compressor Station 206. As discussed in greater detail below, Commission staff evaluated system alternatives that would involve modifications to existing facilities to avoid the need for Compressor Station 206, alternate sites for Compressor Station 206, as well as an alternate type of compressor unit. The final EIS ultimately concluded that none of the alternatives were feasible, or offered a significant environmental advantage, and found that the proposed project, as modified by Commission staff's recommended mitigation measures, which are attached as conditions to the appendix to this order, was the preferred alternative.[55] We agree with this conclusion.

i. System Alternatives

42. The final EIS evaluates other modifications of Transco's existing system that, if implemented, avoid the need for Compressor Station 206. The system alternatives include increased compression at existing aboveground facilities, additional pipeline looping, and various combinations of added compression and looping. Based on hydraulic modeling and comparative environmental analysis, the final EIS concludes that alternative modifications of Transco's system are either infeasible due to adverse effects on existing delivery points and/or do not provide a significant environmental advantage when compared to Transco's proposal.[56]

ii. Site Alternatives

43. The final EIS also evaluates 39 potential alternative locations for Compressor Station 206. Staff's preliminary review eliminated 34 of the alternative sites from further

[53] Final EIS at ES-9.

[54] Final EIS at 4-32.

[55] Final EIS at 5-27.

[56] Final EIS at ES-9.

consideration, and the remaining five alternative locations (which included Transco's proposed location) were evaluated in more detail.[57] The final EIS concludes that none of the alternatives offer a significant environmental advantage over Transco's proposed site.

iii. Electric Motor-driven Compressor Unit Alternative

44. The use of electric motor-driven compressors would avoid the local operating air emissions associated with the proposed natural gas-fired turbines. However, electricity is a secondary source of energy, i.e., other primary sources of energy such as fossil fuels, nuclear, wind, solar, and hydroelectric are required to generate electricity. The electric motor-driven compression alternative would also require the construction of additional electric transmission infrastructure in the area, increasing impacts on resources and landowners. Therefore, the final EIS concludes that the electric motor-driven compression alternative does not offer a significant environmental advantage over Transco's proposed use of natural gas-fired turbines at Compressor Station 206.[58]

2. Raritan Bay Loop

a. Offshore Aquatic Resources

45. As detailed in the final EIS, the primary adverse effects on aquatic resources from construction of the Raritan Bay Loop include impacts from seafloor disturbing activities and noise. Because the loop would be installed beneath the seafloor, operation of the pipeline will have little to no impact on aquatic resources.[59]

b. Seafloor Disturbing Activities

i. Direct Construction Impacts

46. Construction of the Raritan Bay Loop will occur within a 14,165.5-acre workspace, of which only 87.8 acres will be directly impacted by mechanical activities (e.g., excavation, pile-driving, anchoring). Despite numerous commenters' assertions that this entire area of seafloor would be affected by the project, the great majority of this workspace is needed to accommodate the anchor spread around construction barges and will be undisturbed.[60] Direct impacts due to seafloor disturbance would include

[57] Final EIS at ES-10.

[58] *Id.*

[59] *Id.*

[60] *Id.*

mortality, injury, or temporary displacement of organisms living near the 87.8 acres of affected seafloor, however pelagic fish, sea turtles, and marine mammals would likely evacuate the area temporarily to avoid the disturbance.[61]

ii. Turbidity and Sediment Redeposition

47. Transco conducted sampling to determine the chemical and physical characteristics of sediments along the pipeline route. This data was used to predict the turbidity and sediment deposition that would result from installing and backfilling the Raritan Bay Loop. Based on this modeling, total suspended solids (a measure of turbidity) significantly exceeding ambient conditions would extend a maximum of 3,150 feet from excavation activities, although the majority of sediment plumes from excavation would extend 262 feet to 1,345 feet from the source, and in the worst-case excavation scenario, total suspended solids would return to ambient conditions within 7.9 hours after sediment disturbance.[62] During backfilling, concentrations significantly exceeding ambient conditions would extend up to approximately 5,000 feet from the source, but would return to ambient conditions within 3.5 hours.[63] Sediment transport modeling also estimated that 947.4 acres of seafloor would be indirectly affected by redeposition of at least 0.12 inch (0.3 centimeter) of sediment around excavation and backfill areas.[64]

iii. Contaminated Sediments

48. Sediments within Raritan and Lower New York Bays contain contaminants from historical and ongoing anthropogenic sources. Contaminants that become resuspended during sediment-disturbing activities are expected to generally be adsorbed to organic material and fine-grained sediment and redeposited as sediment-bound compounds. The redeposited sediment is expected to be similar in contaminant concentration to the ambient conditions of the surface sediments at the depositional locations.[65] Based on the relatively limited distribution of upper-level exceedances for mercury and other heavy metals along the project route, the short duration of turbidity plumes, and the expected

[61] Final EIS at ES-11.

[62] *Id.*

[63] *Id.*

[64] *Id.*

[65] *Id.*

fate of metals released into the marine environment, the risk to aquatic resources from exposure to resuspended inorganic contaminants is expected to be low.[66]

49. Transco conducted contaminant transport modeling for compounds exceeding New York State Department of Environmental Conservation (DEC) Class C and high Class B concentration thresholds in sediment samples. Based on the modeling, the maximum contaminant concentrations would generally meet water quality standards at the edge of a 500-foot mixing zone.[67] For some of the modeled scenarios, water quality standards for mercury and copper would not be met at the edge of the mixing zone, based on conservative rates of continuous dredging. The New York State DEC will require, and Transco has committed to, monitoring of the water column for chemical contaminants in New York State waters to ensure compliance with state water quality standards as part of the project's New York State DEC Water Quality Certification.[68]

50. The final EIS concludes that, based on the relatively limited duration, extent, and magnitude of project-related turbidity and sediment redeposition, as well as Transco's commitment to restrict work in sensitive areas as much as possible, no significant, long-term impacts on the benthic community or other aquatic resources are expected from the project-related seafloor-disturbing activities.[69] To more precisely inform the record, Environmental Condition 14 requires Transco to file documentation of its consultations with New York State DEC, New Jersey DEP, and the U.S. National Marine Fisheries Service (NMFS) regarding its final mitigation for fisheries and aquatic resources, including construction timing window commitments. In addition, to verify that benthic communities recover as expected, Environmental Condition 15 requires Transco to file a 5-year post-construction benthic sampling and monitoring plan, prepared in consultation with the NMFS, for review and written approval of the Director of OEP. Further, Environmental Condition 16 requires Transco to file the final volume of dredge material for disposal at both onshore and offshore locations, the locations themselves, and any agency comments on disposal sites.

c. Underwater Noise

51. The primary sources of underwater noise associated with the project include propeller noise associated with the movement of project-related vessels and noise

[66] Final EIS at ES-12.

[67] *Id.*

[68] Final EIS at 4-125.

[69] Final EIS at ES-12.

generated during pile driving and other pipeline installation activities. Project-related underwater noise could impact fish and marine mammals in the area. The final EIS explains that aboveground construction noise is not expected to impact marine species, and operation of the Raritan Bay Loop would not be a significant source of underwater noise.[70] We agree.

52. The Raritan Bay Loop is within the largest port on the east coast of the United States. The background noise in the underwater environment is similar to the noise that would be generated by the largest vessels that would be used during construction of the pipeline. As such, the final EIS concludes that the movement of the relatively small number of vessels associated with the project is not expected to substantially affect underwater noise.[71]

53. Acoustic modeling indicates that the noise generated by pile driving would exceed both the injury and behavioral disturbance thresholds for fish.[72] The distance for injury or behavioral disturbance to fish associated with other construction activities will be less than that associated with pile driving. Further, an individual fish would need to remain within this area during the entire duration of the pile driving event to experience an injury.[73] The final EIS concludes that, because the duration of construction activities would be limited and most fish species would be able to leave the area of disturbance, construction-related noise impacts on fish are expected to be temporary and moderate, and population-level impacts due to construction noise are not expected.[74] In addition, Environmental Condition 18 requires Transco to file a noise monitoring and mitigation plan to ensure that actual noise is consistent with the predicted values and/or to reduce the noise to acceptable levels.

54. Pile driving noise could result in sound levels capable of causing marine mammal behavior disturbance up to 13.4 miles from the source for the largest piles installed by impact hammer, and up to 1.3 miles from the source for the largest piles installed by a vibratory method.[75] Noise associated with other in-water construction methods would be

[70] Final EIS at 4-127.

[71] Final EIS at ES-12.

[72] Final EIS at ES-12 – ES-13.

[73] Final EIS at ES-13.

[74] Final EIS at 4-129.

[75] Final EIS at 4-130.

of limited duration and extent and, thus, would not be expected to substantially disturb marine mammals.[76] The final EIS explains that, given the amount of existing vessel traffic noise in the project area, as well as noise monitoring reports from other recent underwater pile driving activities, it is expected that the sound generated by pile driving would be masked by underwater ambient noise at much shorter distances than the modeled results.[77] Given that the auditory injury thresholds are with respect to cumulative sound impacts, a marine mammal would need to spend approximately 24 hours within this zone of exceedance to potentially experience a permanent hearing impact.[78] Marine mammal densities in the project area are low, and individual marine mammals would be unlikely to remain in the zone of exceedance long enough to be injured by pile driving noise.[79]

55. Transco is consulting with NMFS and has submitted a draft application for an Incidental Harassment Authorization (IHA), and anticipates that its final IHA application will request Level B takes of up to 10 marine mammal species that may be present in the vicinity of the Raritan Bay Loop during construction.[80] Environmental Condition 17 requires that Transco file its final acoustic analysis and a copy of the IHA application prior to construction of the Raritan Bay Loop. In addition, Transco developed a Marine Mammal Observer Training and Response Protocol Plan that describes the actions that would be implemented during offshore construction to further minimize impacts on marine mammals and protected species.[81]

56. By constructing the Raritan Bay Loop in accordance with measures that may be included in the NMFS IHA, Transco's plans, and staff's recommendations, the final EIS concludes that construction noise would not have a significant impact on fish or marine mammals in the project area. We agree.

---

[76] Final EIS at ES-13.

[77] Final EIS at 5-12.

[78] Final EIS at 5-13.

[79] *Id.*

[80] *Id.*

[81] *Id.*

3. Federally Listed Species

57. According to the U.S. Fish and Wildlife Service (FWS) and NMFS, 23 federal listed or proposed species may occur in the project area.[82] Commission staff determined that the projects would have no effect on 7 of the 23 species, and is not likely to adversely affect 12 of the 23 species.[83] On February 12, 2019, the New Jersey Field Office of the FWS concurred with Commission staff's conclusion that the project would not jeopardize the continued existence of the Eastern black rail, a species proposed for listing by the FWS. On April 9, 2019, the Pennsylvania Field Office of the FWS also concurred with this determination. Therefore, ESA consultation with the FWS is complete. Due to potential pile driving noise impacts, the final EIS concludes that the project may affect, and is likely to adversely affect, three federally listed aquatic species under NMFS jurisdiction: the North Atlantic right whale, fin whale, and Atlantic sturgeon.[84] In response to Commission staff's Biological Assessment for these species, the NMFS will issue a Biological Opinion as to whether or not the project would likely jeopardize the continued existence of these listed species. The Biological Opinion may include binding and/or discretionary recommendations to reduce impacts as well as an Incidental Take Statement for those actions that may harm or harass an ESA-listed species. Environmental Condition 19 requires that Commission staff complete ESA consultation with NMFS prior to any construction.

4. Final EIS Comments

58. On February 14, 2019, EPA filed comments on Commission staff's final General Conformity Determination in the final EIS.[85] On March 12, 2019, New Jersey DEP filed comments on the final EIS. New Jersey DEP's comments generally advise Transco on state permitting processes, and state that the New Jersey DEP concurs with the conclusions of the final EIS regarding Section 106 consultation for cultural and historic resources. Therefore, we do not further address the cultural and historic resource issues. In addition, New Jersey DEP comments on state-listed species, marine fisheries, drilling fluid toxicity, acid soils, and the final General Conformity Determination. On March 14, 2019, Eastern Environmental Law Center (EELC) filed comments on the final EIS reiterating its previously stated concerns with the draft EIS's analysis of alternatives

[82] Final EIS at 5-14.

[83] *Id.*

[84] Final EIS at 5-14.

[85] Final EIS at 4-303 – 4-307.

and impacts on water, air quality, safety, and greenhouse gas emissions. The EPA's, New Jersey DEP's, and EELC's substantive comments are addressed below.

a. State-listed Species

59. The New Jersey DEP contends that the final EIS is deficient in its analysis of potential impacts on the state-listed bald eagle, osprey, and black-crowned night heron. The New Jersey DEP comments that habitat for these species is present in the project area, and references fresh water wetland and flood hazard area permit requirements that may include construction timing restrictions and/or work space restrictions for these species.

60. As stated in the final EIS, the Commission must comply with federal statutes including the Bald and Golden Eagle Protection Act, which prohibits take of any bald eagle unless allowed by permit.[86] Transco has not requested such a permit, but has committed to work closely with appropriate agencies to determine if new nests are documented near the project prior to or during construction. The New Jersey Field Office of the FWS identified a known bald eagle's nest approximately 1 mile from the Madison Loop.[87] Transco proposes to implement measures in the FWS' National Bald Eagle Management Guidelines to avoid or minimize construction-related impacts on the species.[88] Transco has also applied for applicable flood hazard area and fresh water wetland permits from the New Jersey DEP, which may include construction timing restrictions and work space restrictions related to the bald eagle.

61. Regarding impacts to the osprey, the final EIS notes that the osprey is a state-listed threatened species in New Jersey, and New Jersey DEP rules prohibit work within 300 meters of an osprey nest between April 1 and August 31.[89] Transco consulted with the New Jersey DEP and surveyed the project area, identifying one potential osprey nest within 300 meters of the Madison Loop, another potential nest within 300 meters of the Raritan Bay Loop, and a third potential nest near the Raritan Bay Loop which appeared to be inactive. Transco has committed to monitor all potential osprey nests to determine if

[86] 16 U.S.C. § 668 – 668d (2012).

[87] Final EIS at 4-83.

[88] Final EIS at 4-86.

[89] Final EIS at 4-196.

they are active at the time of construction and will work with the New Jersey DEP to determine appropriate measures to avoid disturbing active nests during construction.[90]

62. The final EIS also notes that a breeding-only population of the state-threatened black-crowned night heron may occur in the vicinity of the Madison Loop.[91] Further, the New Jersey DEP notes that its fresh water wetland and flood hazard area permits for which Transco has applied may restrict project work between the April 1 and August 15 nesting period, which would reduce potential impacts to the black-crowned night heron. In addition, the bald eagle, osprey, and black-crowned night heron are all included in Transco's final Migratory Bird Plan, which incorporates measures from the New Jersey Field Office of the FWS intended to minimize impacts on migratory birds, including avoiding vegetation clearing between April 1 and August 31.[92]

63. The final EIS concludes that most impacts on wildlife resources would be temporary and that impacts on migratory birds, including the species raised in the New Jersey DEP's comments on the final EIS, would not be significant. We agree.

b. Marine Fisheries

64. The New Jersey DEP provides updates regarding on-going consultations between Transco, the New Jersey DEP, the New York State DEC, and NMFS concerning construction timing restrictions and allowable work within these periods for certain marine resources. The New Jersey DEP generally agrees with updated plans for winter flounder, anadromous fish, and blue crab, with minor recommended adjustments. The New Jersey DEP also concludes that the project would result in a brief disruption to commercial and recreational fisheries which would be resolved naturally post-construction.

65. The New Jersey DEP recommends that Transco minimize impacts on surf clam areas and shellfish habitat to the greatest extent practical. The final EIS states that Transco continues to consult with the New Jersey DEP regarding mitigation for impacts on shellfish areas, which may include a monetary contribution to New Jersey DEP's dedicated account for shellfish mitigation.[93]

---

[90] Final EIS at 4-196.

[91] Final EIS at 4-195.

[92] Final EIS at 4-87.

[93] Final EIS at 4-119.

66. Environmental Condition 14 of this order requires Transco to file documentation of its final consultations with the New Jersey DEP, the New York State DEC, and NMFS regarding its final proposed mitigation for fisheries and aquatic resources. The final EIS concludes that, with Transco's commitment to restrict work in sensitive areas as much as possible, impacts on fishery and aquatic resources would be less than significant. We agree with this conclusion.

c. Drilling Fluid Toxicity

67. The New Jersey DEP comments that safety data sheets for all drilling fluid additives which would be used in New Jersey and which are not National Sanitation Foundation/American National Standards Institute certified must be provided to the state for approval. The final EIS states that Transco would provide safety data sheets for all drilling fluid additives to both the Commission and to applicable state agencies.[94]

d. Acid Soils

68. The New Jersey DEP reiterates its previous concerns regarding the potential to encounter acid forming soils during construction of the Madison and Raritan Bay Loops. In its comments, the New Jersey DEP asserts that historical aerial photographs document poor revegetation in portions of Transco's existing pipeline rights-of-way, apparently attributing the perceived lack of vegetation to the presence of acid forming soils. The New Jersey DEP also expresses concern that cuttings from the planned horizontal directional drills (HDDs) along the loops would be acid forming.

69. The final EIS summarizes Transco's project-specific Acid Producing Soils Control Plan, which was reviewed and approved by the New Jersey DEP Freehold Soil Conservation District. Among the measures that would be implemented are Transco's commitment to monitor the construction workspace after top soiling and seeding to ensure there is adequate stabilization and that no revegetation problems emerge, and to monitor locations where acid forming soils have been place or buried for a period of at least 2 years to ensure that acid leachate does not migrate off-site.[95] The final EIS also notes that Commission staff will periodically inspect the right-of-way until restoration is complete, and that Transco would be required to extend its post-construction monitoring program and implement corrective actions if restoration is deemed insufficient.[96]

---

[94] Final EIS at 2-49.

[95] Final EIS at 4-22.

[96] Final EIS at 2-61.

70. Regarding potential impacts associated with acid forming soil becoming incorporated in HDD drill cuttings, the final EIS explains that Transco would haul HDD drilling fluids from the four onshore HDDs to an approved disposal site in accordance with applicable state and federal regulations.[97]

71. The final EIS concludes that impacts on soil resources and vegetation would be reduced to less than significant levels with implementation of Transco's proposed plans and additional measures recommended by Commission staff, which are attached as conditions of this order. We agree with these conclusions.

e. Air Quality

72. The EELC reiterates its previous concerns that a health impact assessment be completed due to new New Jersey DEP reporting thresholds (established February, 2018)[98] for hazardous air pollutants (HAP) at Compressor Station 206. Table 4.10.1-6 in the final EIS lists the potential HAPs at Compressor Station 206. While the Commission acknowledges that six of these HAPs would exceed the new New Jersey DEP reporting thresholds, Transco received its air permit for Compressor Station 206 on September 7, 2017 (see table 1.5-1 in the final EIS), prior to this rule taking effect, and the new thresholds do not apply retroactively. Additionally, there are no requirements at the federal level that would necessitate a health impact assessment be completed, and given that Compressor Station 206 is a minor source of air pollution, Commission staff determined in the final EIS that a health impact assessment for a facility of this size is not warranted.[99] We concur.

f. General Conformity

73. The final EIS determines that the Madison Loop, Raritan Bay Loop, and Compressor Station 206 will be located within the New Jersey-New York-Connecticut Interstate Air Quality Control Region (AQCR), which is designated as nonattainment for various air pollutants. In particular, direct and indirect construction emissions of these project components will result in emissions of nitrogen oxides (NOx), a precursor to ozone formation, which require a General Conformity Determination under the Clean Air

[97] Final EIS at 4-46.

[98] N.J.A.C. 7:27:17.

[99] Final EIS at 4-313.

Act.[100] The Commission issued a draft General Conformity Determination on September 18, 2018, with a 30-day public comment period, identifying that Transco would achieve conformance by fully mitigating all NOx construction emissions for the Madison Loop, Raritan Bay Loop, and Compressor Station 206 through a combination of direct mitigation projects and/or the purchasing of Emission Reduction Credits (ERC) or Creditable Emission Reductions (CER)[101] within the same AQCR. A final General Conformity Determination and responses to comments on the draft General Conformity Determination were included as appendices I and M to the final EIS, respectively.

74. As an initial matter of applicability, New Jersey DEP notes that on November 14, 2018, EPA proposed to reclassify the New Jersey-New York-Connecticut Interstate AQCR from "moderate" to "serious" nonattainment. The final General Conformity Determination acknowledges this proposal, but explains that because EPA has not issued a final rulemaking, the final General Conformity Determination is based on the current designation of moderate, and notes that this proposal has no effect on this project's applicability, as the process was triggered under the current higher threshold.[102]

75. To support the final General Conformity Determination, Transco developed an Air Quality Technical Report (AQTR) which includes detailed emission estimates of the four possible construction scenarios that could occur. Transco also developed an Air Quality Management Plan (AQMP) that describes the possible mitigation pathways Transco explored, including funding direct mitigation projects and/or the purchase of offsets. Because actual emissions may vary from estimates, the AQMP includes a Construction Emission Tracking Plan (CETP) and Mitigation Project Emission Tracking Plan (MPETP) under which Transco will track actual construction emissions that occur and actual emission reductions that are realized from implemented mitigation projects.

---

[100] 40 C.F.R. pt. 93, Subpart B – Determining Conformity of General Federal Actions to State or Federal Implementation Plans.

[101] In New York, an ERC is the actual decrease in emissions of a regulated pollutant, in tons per year. In New Jersey, a CER serves the same function as an ERC. An ERC or CER represents a permanent, quantifiable, federally enforceable surplus reduction of emissions that has or will have resulted from a physical or operational change of an emission source subject federal air permitting. ERCs and CERs are emissions that have been retired by existing facilities and are available for purchase to offset future projects.

[102] Final EIS, Appendix I: "Final General Conformity Determination", I-5 – I-6.

76. The final General Conformity Determination included eight recommendations to finalize the selected construction emission scenario and construction equipment, revise minor aspects of the AQTR, CETP, and MPETP, and share the tracking plans with EPA, New Jersey DEP, and New York State DEC on a monthly basis during construction. New Jersey DEP concurs with seven of staff's recommendations in the final General Conformity Determination (New Jersey DEP had concerns with the eighth recommendation as discussed below). The seven recommendations have been combined and are included as Environmental Conditions 23, 24, and 25 of this order.

77. The EPA states that the General Conformity Determination "contains significant uncertainties with respect to both the project emissions and the mitigation plan" and that allowing EPA and the states to review and comment on the final AQTR, CETP, and MPETP could "further safeguard" compliance with General Conformity. New Jersey DEP notes that the currently estimated construction air emissions may change due to uncertainties associated with the equipment and the engine tier ratings of the equipment (in particular whether the clamshell dredge equipment will meet Tier 3 emission factors), and argues that the Commission should require Transco to revise its emission estimates, and mitigate the actual emissions that occur if equipment onsite does not meet their Tier 3 standards.

78. The procedures for performing a General Conformity Determination require the analysis to be "based on the latest planning assumptions" and using "the latest and most accurate emission estimation techniques available" as described in the regulations.[103] Commission staff, EPA, the New Jersey DEP, and the New York State DEC received numerous opportunities to review the AQTR and worked with Transco in refining the AQTR to ensure all emission sources used appropriate emission factors and data sources.[104] Drafts of the AQMP, MPETP, and CETP were also provided throughout the review of the project with opportunities for EPA and the states to comment on the methodologies for estimating and tracking project construction emissions and mitigation projects. Transco has incorporated changes to these methodologies in response to input received from EPA, the New Jersey DEP, and the New York State DEC. We acknowledge that at the time of development of the final General Conformity Determination, some planning details were still unknown (e.g., which specific pieces/models of construction equipment would be onsite during construction or which emissions scenario other agencies would ultimately permit). Transco made all efforts to refine unknowns, and justified its assumptions when it had to do so (e.g., Transco supported its assumption that clamshell dredge equipment would meet Tier 3 emission factors based on its experience with similar projects and from input received from

[103] 40 C.F.R. pt. 93.159(a), (b) (2018).

[104] Final EIS at 4-304.

construction contractors), so that the final General Conformity Determination could be based on the latest planning assumptions and estimates.

79. The final General Conformity Determination also recognizes that actual emissions and equipment on-site may differ from estimates. The CETP will account for each piece of equipment that is actually used during construction, how often it is used, and the emissions from that equipment. As recommended in the final General Conformity Determination, this order includes Environmental Condition 25, which requires that Transco provide copies of the MPETP and CETP reports to EPA, New Jersey DEP, and New York State DEC on a monthly basis during construction. If actual emissions are lower than those estimated, Transco is still responsible for fully offsetting the emission estimates identified in the final General Conformity Determination. The General Conformity Regulations also account for instances when actual emissions are greater than those estimated in a conformity determination, whereby a new or revised conformity determination is required if any modification to the action (e.g. schedule delays or different construction equipment) result in an increase in emissions above the General Conformity applicability thresholds.[105]

80. With respect to mitigating emissions, EPA and New Jersey DEP comment that the "NJ TRANSIT Support Systems for New Dual Mode Locomotives" direct mitigation project included in the final General Conformity Determination is not fully explained, and may not be an eligible direct mitigation project. For example, New Jersey DEP states that if Transco is funding the actual replacement of the 17 locomotives, then it likely does qualify as a direct mitigation project; but if Transco is only providing funding for dispensing facilities associated with the diesel emission fluid, then it would not qualify. Appendix A to the final General Conformity Determination includes a summarization of each direct mitigation project and the supporting emission calculations.[106] As explained in Appendix A for the "NJ TRANSIT Support Systems for New Dual Mode Locomotives" direct mitigation project, in December 2017, NJ TRANSIT exercised an option to purchase 17 modernized locomotives, which will replace NJ TRANSIT's aging fleet of locomotives, and can operate under both diesel and electric power. Appendix A further explains that the new "[locomotives] will meet the current EPA Tier 4 requirements, reducing emissions when operating in diesel mode, as compared to the locomotives to be replaced, and producing no emissions when operating

[105] 40 C.F.R. pt. 93.157(a). See also, Federal Aviation Administration and EPA, *General Conformity Guidance for Airports Questions and Answers*, at 24 (September 2002).

[106] Final EIS, Appendix I: "Final General Conformity Determination", Appendix A "Project Mitigation Calculations" at A-5.

in electric mode."[107] The description of this project makes no reference to funding fuel dispensing facilities, and appears to be solely related to the purchase of new locomotives. Therefore, we find that this project qualifies as a direct mitigation project.

81. New Jersey DEP expresses concern with the "NJ Motor Trucking Association and Other Independent Trucking Companies - Truck Replacement Programs" direct mitigation projects, which indicate an estimated total of 1,000 trucks would need to be replaced by 2020. New Jersey DEP has concerns that this amount of truck replacements may not be feasible within the timeframe needed. The final General Conformity Determination supports the Truck Replacement Program mitigation projects, stating that Transco has executed a Memorandum of Agreement which outlines the process for determining truck eligibility, replacement, and scrappage of old trucks. Further, the MPETP will track all emissions realized from the mitigation projects, and should Transco be unable to replace the current estimated number of trucks, the remaining emissions would be mitigated through the purchase of ERCs/CERs, as is described in the final General Conformity Determination.[108]

82. New Jersey DEP disagrees with the final General Conformity Determination's reliance on direct mitigation projects that could be implemented prior to construction of only the Raritan Bay Loop. New Jersey DEP states that other project facilities are also subject to general conformity, and mitigation projects should be implemented prior to any construction in 2020, not just construction on the Raritan Bay Loop. Therefore, applicable Environmental Conditions 23 and 26 have been revised to apply "prior to construction of the facilities which require mitigation/emission offsets under the final General Conformity Determination".

83. New Jersey DEP also disagrees with the final General Conformity Determination's conclusion that the use of an alternate timeline to offset emissions is not considered feasible because state agencies have not approved its use. New Jersey DEP comments that it will consider any reasonable proposed alternate timeline. We appreciate New Jersey DEP's willingness to keep this option available. However, as discussed in the final General Conformity Determination, to use this option, the regulations require the applicable state agencies' (New Jersey DEP and New York State DEC) approval. During an early consultation meeting[109] on this topic with EPA, New Jersey DEP, and New York State DEC, Commission staff explained that such approval (or at least a preliminary approval) would be needed prior to issuance of a draft General Conformity Determination,

---

[107] *Id.*

[108] Final EIS, Appendix I: "Final General Conformity Determination", I-18 - I-19.

[109] *See* December 12, 2017 General Conformity Discussion, filed in Docket No. CP17-101-000 (accession no. 20171222-4003).

as staff would need to support its demonstration of a feasible method of conformance. None of the staff who attended the meeting from any of the agencies had experience with an alternate timeline, the state agencies could not provide any assurances that such a proposal would be approved or the timeline for such an approval, the approval process would introduce additional complexity in an already challenging process, and New York State DEC noted a preference for concurrent mitigation. Based on these challenges, Transco did not pursue an alternate timeline, and no state agencies approved the use of an alternate timeline. Because this provision was not included in the final General Conformity Determination, implementing it would require the issuance of a revised General Conformity Determination to disclose a change in method of conformance. Regardless, Transco has supported a sufficient number of offsets via direct mitigation projects by 2020 and the purchase of ERCs/CERs, rendering an alternate timeline unnecessary.

84. EPA and New Jersey DEP reiterate their preference for the use of direct mitigation projects over the purchase of ERCs/CERs. New Jersey DEP requests that ERCs/CERs only be used as a backup to allow for technical delays, schedule changes, or to prevent the project from being shut down while direct mitigation measures are being implemented, and applies this request to the eighth recommendation in the final General Conformity Determination. As the final General Conformity Determination states, generally, we agree that direct mitigation is preferable to ERCs/CERs; however, there are an insufficient amount of offsets that could be generated from feasible direct mitigation projects within the timeframe required.[110] Further, as New Jersey DEP states in its comments, it may not be possible to fully implement all of the truck replacements within the required timeframe. As such, we expect at least some portion of the project's construction emissions will be mitigated through the purchase of ERCs/CERs. The final General Conformity Determination finds both methods (direct mitigation and the purchase of emissions offsets) to be acceptable methods of demonstrating conformance, and New Jersey DEP acknowledges this finding in its comments. Because this method was disclosed and selected in the final General Conformity Determination, and is legally allowable, we concur with the final General Conformity Determination's finding that the purchase of emissions offsets is acceptable for this project, and maintain the eighth recommendation as Environmental Condition 26.

85. The final General Conformity Determination states that "Transco would purchase ERCs and CERs based on agency permitting for the estimated construction emissions of NOx."[111] New Jersey DEP argues that there is no agency permitting for construction emissions and instead these need to be covered under the General Conformity Regulations. New Jersey DEP misunderstands the intent of this sentence. Each state

[110] Final EIS, Appendix I: "Final General Conformity Determination", I-18 - I-19.

[111] Final EIS, Appendix I: "Final General Conformity Determination", I-19.

agency maintains a database of emission credits that are eligible for use in air permitting and general conformity. In order to use ERCs/CERS to offset project construction emissions, Transco must demonstrate that purchased credits are "permitted" or eligible under the respective state programs. Given the confusion, we have revised Environmental Condition 26 to clarify the requirement.

86. EPA and New Jersey DEP provide conflicting comments regarding the final General Conformity Determination's statements that direct mitigation projects would need to be completed and operational prior to the start of construction of the Northeast Supply Enhancement Project.[112] EPA argues that this restriction could prevent the use of some preferred direct mitigation projects that could materialize during construction and provide contemporaneous offsets during the year in which construction occurs. EPA proposes that with appropriate safeguards in place, including emission and mitigation tracking, information sharing with EPA and the states, a contingency plan to purchase offsets if mitigation projects do not materialize, and the ability to order a halt to construction if emission offset obligations are not met, such a requirement would not be necessary. Specifically, EPA notes that the Commission could evaluate mitigation project eligibility on a year-by-year basis, if construction spans multiple calendar years, or consider whether mitigation projects are substantially complete but not fully operational at the start of construction. Conversely, New Jersey DEP references EPA's General Conformity Training Module which states that "mitigation measures must be in place before emissions from the action start."[113] New Jersey DEP instead asks detailed questions regarding who issues a Notice to Proceed with Construction, when the notice will be issued, and if all state permits need to be obtained before the notice may be issued. New Jersey DEP expresses concern that if a notice is issued well before actual construction, the amount of time for direct mitigation projects would be limited.

87. We acknowledge that requiring mitigation to be in place prior to construction could result in more offsets being purchased, however purchasing these offsets remains a valid method of demonstrating conformance under the General Conformity regulations,[114] and Transco is free to use this method for any portion of the emissions subject to General Conformity.

88. We also note that the required amount of purchased offsets have not always been available in the project's AQCR. Because offsets cannot be "reserved" for Transco should they be necessary, and other entities could purchase the offsets over the next year,

---

[112] Final EIS, Appendix I: "Final General Conformity Determination", I-16 - I-20.

[113] EPA, *General Conformity Training Module 3.5: Demonstrating Conformity,* https://www.epa.gov/general-conformity/general-conformity-training-modules.

[114] 40 C.F.R. pt. 93.

we find that it is not an acceptable contingency plan to purchase offsets, as they may not be available by mid-2020. Further, as identified in the final General Conformity Determination, construction in the AQCR that triggered the General Conformity Regulations would occur solely within 1 year (2020); therefore, evaluation of mitigation project eligibility on a year-by-year basis is not appropriate.

89. We also acknowledge New Jersey DEP's concerns regarding the timing of a notice authorizing construction and having mitigation in place. At the outset, we note that many of the conditions attached to this order include a timing component, requiring the conditions be satisfied in order for Commission staff to allow construction to begin. Environmental Condition 10 requires that Transco receive all applicable authorizations required under federal law (including those delegated to states) prior to construction. In 2019 Transco intends to primarily construct project components that are not subject to the General Conformity Determination. Construction of these facilities should not affect the timing of mitigation projects or offsets. We have revised Environmental Condition 26 to emphasize that this condition only applies prior to construction of the facilities subject to the final General Conformity Determination. We also note that while Environmental Condition 26 requires mitigation projects to be "in place", this language is intended accommodate the flexibility envisioned in EPA's training module as allowable under the General Conformity regulations[115] for Transco to identify the status of its mitigation projects, along with concrete timelines for their implementation to support their use. For example, if Transco can demonstrate that trucks or replacement locomotives have been purchased and have a scheduled delivery date with timeline for implementation during 2020, this would be sufficient evidence to support construction. However, simply having a program where third parties have the voluntary option to replace their trucks, without specific, and concrete information on how many have signed up and when they will be replaced is not sufficient. With these clarifications, we find that Environmental Condition 26 sufficiently balances EPA and New Jersey DEP's concerns while ensuring the Commission's compliance with the General Conformity regulations.

g. Greenhouse Gas Emissions

90. The EELC reiterates comments it previously filed on the draft EIS, namely that the Commission fails to disclose greenhouse gas (GHG) emissions, or include an estimate of the project's downstream emissions. Regarding the project's GHG emissions, the final EIS quantifies GHG emissions during project construction and operation,[116] and EELC does not argue that any downstream end uses are causally connected to the Northeast Supply

[115] 40 C.F.R. pt. 92.

[116] Final EIS at 4-309 – 4-310. GHG emissions are expressed in terms of carbon dioxide equivalents, or CO_2e.

Enhancement Project such that resulting emissions need be considered in the final EIS as indirect impacts. In filings submitted on February 27 and April 24, 2019, Transco states that the project would enable National Grid to convert approximately 8,000 customers a year from heating oil to natural gas, displacing up to 900,000 barrels of oil per year.[117] Transco also indicates that its project would more than offset net GHG emissions under a hypothetical scenario in which the entire capacity of the project would displace existing or new fuel oil use in New York.[118]

5. Environmental Analysis Conclusion

91. We have reviewed the information and analysis contained in the final EIS regarding potential environmental effects of the project, as well as other information in the record. We agree with the conclusions presented in the final EIS and find that the project, if constructed and operated as described in the final EIS, is an environmentally acceptable action. Further, for the reasons discussed throughout the order, as stated above, we find that Transco's Northeast Supply Enhancement Project is in the public convenience and necessity. 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. Commission staff carefully reviews all information submitted and will only issue a notice to proceed with construction 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 project, 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.

92. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or

[117] Transco's February 27, 2019 Filing.

[118] Transco's April 24, 2019 Filing. We also note that the Final EIS states, '[b]urning natural gas produces about 80 percent less particulate matter and lower emissions of other contaminants than burning no. 4 fuel oil (NYCDEP, 2012)." Final EIS at 4-389.

local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.[119]

93. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, and exhibits thereto, and all comments, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Transco, authorizing it to construct and operate the proposed facilities, as described and conditioned herein, and as more fully described in the application, and subsequent filings by the applicant, including any commitments made therein.

(B) The certificate authority issued in Ordering Paragraph (A) is conditioned on:

(1) Transco's completion of construction of the proposed facilities and making them available for service within two years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;

(2) Transco's compliance with all applicable Commission regulations under the NGA including, but not limited to, Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

(3) Transco's compliance with the environmental conditions listed in the appendix to this order; and

(4) Transco's filing a written statement affirming that it has executed firm service agreements for volumes and service terms equivalent to those in its precedent agreements, prior to commencing construction.

(C) Transco's revised Rate Schedule FT incremental rates are approved as the initial rates for the proposed project.

---

[119] *See* 15 U.S.C. § 717r(d) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); *see also Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers,* 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

(D) Transco's request to utilize its system-wide fuel and electric power rates is approved.

(E) Transco shall file actual tariff records setting forth the initial rate for service no earlier than 60 days and no later than 30 days, prior to the date the project facilities go into service.

(F) Transco 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 Transco. Transco shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Commissioner LaFleur is concurring with a separate statement attached.
Commissioner Glick is dissenting in part with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A – Environmental Conditions

As recommended in the environmental impact statement (EIS) and modified herein, this authorization includes the following conditions:

1. Transco shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EIS, unless modified by the Order. Transco 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. 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 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 environmental conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.

3. **Prior to any construction**, Transco 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.

4. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Transco shall file with the Secretary any revised detailed survey

alignment sheets/maps 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 alignment sheets/maps.

Transco's exercise of eminent domain authority granted under Natural Gas Act section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Transco's right of eminent domain granted under Natural Gas Act section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Transco shall file with the Secretary detailed alignment sheets/maps and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and 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 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.

6. **Within 60 days of the acceptance of the authorization and before construction begins**, Transco shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Transco must file revisions to the plan as schedules change. The plan shall identify:

    a. how Transco 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 Transco 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 per spread, 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 Transco 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 Transco's organization having responsibility for compliance;

    g. the procedures (including use of contract penalties) Transco will follow if noncompliance occurs; and

    h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

        i. the completion of all required surveys and reports;
        ii. the environmental compliance training of onsite personnel;
        iii. the start of construction; and
        iv. the start and completion of restoration.

7. Transco shall employ at least one EI per construction spread. The EI shall be:

    a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 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.

8. Beginning with the filing of its Implementation Plan, Transco shall file updated status reports with the Secretary on a **weekly** basis until all construction and restoration activities are complete. 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 Transco's efforts to obtain the necessary federal authorizations;

b. the construction status of each 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 and each instance of noncompliance observed by the EIs 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 actions implemented in response to all instances of noncompliance;

e. the effectiveness of all corrective 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 Transco from other federal, state, or local permitting agencies concerning instances of noncompliance, and Transco's response.

9. Transco 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. **Prior to construction**, Transco shall mail the complaint procedures to each landowner whose property would be crossed by the project.

    a. In its letter to affected landowners, Transco shall:

        i. provide a local contact that the landowners should call first with their concerns, and the letter should indicate how soon a landowner should expect a response;

        ii. instruct the landowners that if they are not satisfied with the response, they should call Transco's Hotline, and the letter should indicate how soon to expect a response; and

        iii. instruct the landowners that if they are still not satisfied with the response from Transco's Hotline, they should contact the Commission's Landowner Helpline at 877-337-2237 or at LandownerHelp@ferc.gov.

        b. In addition, Transco shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:

            i. the identity of the caller and date of the call;

            ii. the location by milepost and identification number from the authorized alignment sheet(s) of the affected property;

            iii. a description of the problem/concern; and

            iv. an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

10. Transco must receive written authorization from the Director of OEP **before commencing construction of any project facilities**. To obtain such authorization, Transco must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

11. Transco must receive written authorization from the Director of OEP **before placing the project 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 project are proceeding satisfactorily.

12. **Within 30 days of placing the authorized facilities in service**, Transco shall 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 in the Order Transco has 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.

13. **Prior to construction**, Transco shall file with the Secretary a final table identifying all water supply wells and springs, field-verified, within the construction workspaces of the project, and all other water supply wells and springs within 150 feet of the project workspaces. The table shall provide the location of each well and spring by milepost, and the distance and direction of each well and spring from the construction workspace. Transco shall also describe the measures that it will implement to protect any wells or springs within construction workspaces from physical damage, for review and written approval of the Director of OEP.

14. **Prior to construction of the Raritan Bay Loop**, Transco shall file with the Secretary documentation of consultation with the New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection (New Jersey DEP), and National Marine Fisheries Service (NMFS) regarding its final proposed mitigation for fisheries and aquatic resources, including timing restriction commitments and allowable work within these periods.

15. **Prior to construction of the Raritan Bay Loop**, Transco shall file with the Secretary a 5-year post-construction benthic sampling and monitoring plan, prepared in consultation with the NMFS, for review and written approval of the Director of OEP. The plan shall identify the timing of sampling surveys, success criteria for assessing recovery of benthic species, and reporting requirements.

16. **Prior to construction of the Raritan Bay Loop**, Transco shall file with the Secretary the final volume of dredge material for disposal at onshore and offshore locations; the final onshore and offshore dredge disposal sites; and agency comments for disposal sites.

17. **Prior to construction of the Raritan Bay Loop**, Transco shall file with the Secretary, for review and written approval of the Director of OEP, its final acoustic analysis regarding marine species and a copy of the Incidental Harassment Authorization request submitted to the NMFS.

18. **Prior to construction of the Raritan Bay Loop**, Transco shall file with the Secretary, for review and written approval of the Director of OEP, a pile driving noise monitoring and mitigation plan. The plan shall include:

    a. a description of the equipment and methods Transco will use to measure noise during pile installation and removal;

    b. a typical figure depicting where the measurement equipment would be placed relative to the piles;

    c. provisions for reporting noise to the Federal Energy Regulatory Commission (FERC) and the NMFS;

    d. mitigation measures that Transco will implement to reduce noise to acceptable levels if the noise exceeds predicted levels; and

    e. comments on the plan from the NMFS.

19. Transco shall **not begin construction** activities **until**:

    a. FERC staff receives comments from the NMFS regarding the proposed action;

    b. FERC staff completes formal Endangered Species Act of 1973 consultation with the NMFS, if required; and

    c. Transco has received written notification from the Director of OEP that construction or use of mitigation may begin.

20. **Prior to construction**, Transco shall file with the Secretary documentation of concurrence from the New Jersey DEP, New York Department of State, and New York City Department of City Planning that the project is consistent with the Coastal Zone Management Act.

21. **Prior to construction of the offshore portion of the Raritan Bay Loop**, Transco shall file with the Secretary, for review and written approval of the Director of OEP, the final Cable Crossing Plan for the Neptune Cable and documentation of Transco's consultation with the cable owner regarding the plan.

22. Transco shall **not begin construction** of the Raritan Bay Loop and/or use of associated temporary work areas **until**:

    a. Transco files with the Secretary the results from all supplemental geotechnical soil borings along the Raritan Bay Loop, any necessary cultural resource evaluation reports and avoidance plans, and the New Jersey Historic Preservation Office and New York State Historic Preservation Office comments;

    b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and

    c. the FERC staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Transco in writing that construction may proceed on the Raritan Bay Loop.

    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: "**CUI//PRIV - DO NOT RELEASE**."

23. **Prior to construction of the facilities which require mitigation/emission offsets under the final General Conformity Determination**, Transco shall file with the Secretary, for review and written approval by the Director of OEP, a final Construction Emissions Tracking Plan (CETP), Air Quality Management Plan (AQMP), and Mitigation Project Emissions Tracking Plan (MPETP) which include:

    a. the final General Conformity emissions scenario in all three plans;

    b. emissions associated with the vibratory/diesel pile driving hammers in the final AQMP and CETP;

    c. the U.S. Environmental Protection Agency (EPA) engine tier rating for marine vessels and construction equipment in revised tables in attachment A of the CETP; and

    d. specific details regarding the data to be collected for each vehicle/engine replacement using guidelines and resources from EPA's Clean Diesel Grant Program in the final MPETP.

24. Transco shall include any other actual emission sources that are ultimately used onsite during construction, that are not currently included in the emission estimates, **in the CETP monthly reports**.

25. Transco shall provide its CETP and reports and MPETP and reports directly to contacts at EPA, New York State Department of Environmental Conservation, and New Jersey DEP **on a monthly basis during construction**.

26. **Prior to construction of the facilities which require mitigation/emission offsets under the final General Conformity Determination**, Transco shall file with the Secretary documentation confirming that Transco's mitigation projects are in place and/or that it has purchased eligible Emissions Reduction Credits and/or Creditable Emissions Reductions to offset all estimated construction emissions of nitrogen oxides within the New Jersey-New York-Connecticut Interstate Air Quality Control Region.

27. Transco shall file in the **weekly construction status reports** the following information for horizontal directional drill sites requiring noise mitigation:

    a. the noise measurements from the nearest noise sensitive areas (NSA), obtained at the start of drilling operations;

    b. the noise mitigation that Transco implemented at the start of drilling operations; and

    c. any additional mitigation measures that Transco will implement, for review and written approval by the Director of OEP, if the initial noise measurements exceeded a day-night sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at the NSAs and/or increased noise is greater than 10 dBA over ambient conditions.

28. Transco shall file a noise survey with the Secretary **no later than 60 days** after placing the new equipment at existing Compressor Station 200 in service. If a full load condition noise survey is not possible, Transco shall instead file an interim survey at the maximum possible horsepower load and file the full load survey **within 6 months**. If the noise attributable to the operation of all of the equipment at the modified Compressor Station 200 under interim or full horsepower load exceeds 55 dBA L_{dn} at any nearby NSA, Transco 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. Transco shall confirm compliance with the 55 dBA L_{dn} requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

29. Transco shall file a noise survey with the Secretary **no later than 60 days** after placing Compressor Station 206 in service. If a full load condition noise survey is not possible, Transco shall instead file an interim survey at the maximum possible horsepower load and file the full load survey **within 6 months**. If the noise attributable to the operation of all of the equipment at the station under interim or

full horsepower load exceeds 55 dBA L_{dn} at any nearby NSA, Transco 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. Transco shall confirm compliance with the 55 dBA L_{dn} requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

30. **Prior to construction**, Transco shall file with the Secretary, stamped and sealed by the professional engineer-of-record in New Jersey, the final foundation designs that incorporate safety factors to prevent displacement if future blast intensity increases at the Trap Rock Quarry.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC Docket No. CP17-101-000

(Issued May 3, 2019)

LaFLEUR, Commissioner, *concurring*:

1. Today's order grants Transcontinental Gas Pipe Line Company, LLC's (Transco) request for authorization to construct and operate an expansion on Transco's system in Pennsylvania and New Jersey and its offshore pipeline system in New Jersey and New York state waters (Northeast Supply Enhancement Project).[1] After carefully balancing the need for the project and its environmental impacts, I find the project is in the public interest.[2] For the reasons discussed below, I concur.

2. The Northeast Supply Enhancement Project will provide up to 400,000 Dekatherms per day (Dth/d) of gas delivery capacity. The natural gas would serve National Grid's residential and commercial customers in New York City and Long Island.[3] National Grid plans to convert 8,000 customers per year from No. 2 fuel oil to natural gas as well as

[1] *Transcontinental Gas Pipe Line Company, LLC*, 167 FERC ¶ 61,110 (2019).

[2] *Tennessee Gas Pipeline Company*, 163 FERC ¶ 61,190 (2018) (LaFleur, Comm'r, *concurring*) (*Broad Run*) (moving beyond my disagreement with the Commission's approach to its environmental review of proposed pipeline projects, and making a case-by-case public interest determination based on all the facts in the record).

[3] National Grid's April 2, 2019 Filing a 1. National Grid states that two of National Grid's gas delivery companies, The Brooklyn Union Gas Company d/b/a/ National Grid NY and KeySpan Gas East Corporation d/b/a National Grid LI, have entered into precedent agreements to purchase 100% of the firm transportation capacity created by the Northeast Supply Enhancement Project. National Grid distributes natural gas to nearly two million customers in Nassau and Suffolk Counties on Long Island and in the New York City boroughs of Brooklyn, Queens and Staten Island.

providing natural gas service to new development.[4] The project will displace approximately 900,000 barrels of oil per year.[5]

3. The Commission received detailed information on downstream end use from both Transco and National Grid. I appreciate companies proactively submitting specific information into the record to assist the Commission in quantifying and considering the downstream indirect impacts a proposed project. As I have repeatedly said, I believe it is reasonably foreseeable that the gas being transported will be burned and that downstream greenhouse gas (GHG) emissions will result from burning that gas.[6] Here, National Grid confirms that its customers, mostly residential, rely on natural gas "for critical basic needs including home heating, cooking and hot water."[7] Notably, we also know that this project will displace the use of a more carbon-intensive fuel, No. 2 fuel oil, which will offset some CO_2 emissions from the project.[8] The information provided by Transco and National Grid also provides additional context to the need for the project beyond simply the precedent agreements.

4. The project's Environmental Impact Statement (EIS) quantified the direct GHG emissions from the project's construction and operation,[9] but the EIS did not quantify or consider the downstream emissions impacts. I appreciate that the Commission disclosed the information provided by Transco on downstream end use in today's order, but it did not quantify or consider the downstream emissions. To address my concerns, I have done this analysis and considered the downstream GHG emissions as part of my public interest

---

[4] Transco's February 27, 2019 Filing at 1. Certificate Order, 167 FERC ¶ 61,110 at P 90.

[5] Transco's February 27, 2019 Filing at 1. Certificate Order, 167 FERC ¶ 61,110 at P 90.

[6] *See Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549 (8th Cir. 2003) (*Mid States*). In *Mid States*, the Court concluded that the Surface Transportation Board erred by failing to consider the downstream impacts of the burning of transported coal. Even though the record lacked specificity regarding the extent to which the transported coal would be burned, the Court concluded the nature of the impact was clear. *See also Sierra Club v. FERC*, 867 F.3d 1357 (D.C. Cir. 2017).

[7] National Grid's April 2, 2019 Filing at 1.

[8] Transco's April 24, 2019 Filing at 2. *See also* Transco's February 27, 2019 Filing at 1.

[9] Final EIS at 4-309 — 4-310.

determination. Using a methodology developed by the Environmental Protection Agency (EPA) to estimate the downstream GHG emissions from the Northeast Supply Enhancement Project, and assuming as an upper-bound estimate that all the gas to be transported is eventually combusted, 400,000 Dth/d of natural gas service would result in approximately 7.74 million metric tons per year of downstream CO_2 emissions. This figure represents a 4.73 percent increase in GHG emissions in New York,[10] and a 0.13 percent increase at the national level.[11] However, Transco's filings provide information to offset the downstream GHG emissions estimates. Assuming the project would result in the conversion of 8,000 customers per year from heating oil to natural gas, Transco states that the gas conversation would result in the displacement of 900,000 barrels of heating oil per year, which would result in a small offset of CO_2 emissions.[12] Transco also indicated that considerably more of the gas could be considered an alternative to heating oil for certain end uses.[13]

5. I am encouraged that parties submitted this information in the record, particularly in light of the Commission's asserted inability to ascertain such downstream information. I hope more companies follow the lead of Transco and National Grid and provide the Commission with as much information as possible regarding downstream end use. I believe that this information will assist the Commission in meeting our National Environmental Policy Act[14] (NEPA) responsibilities and weighing the need for and the impact of a proposed project under the Natural Gas Act.

6. Furthermore, specific information on end uses can assist the Commission in making a significance determination. I acknowledge that the disclosure of the

---

[10] U.S. Energy Information Administration, 2018. https://www.eia.gov/environment/emissions/state/.

[11] U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2016*, (April 2018).

[12] Using the same EPA methodology as above, this conversion from heating oil to natural gas would result in a reduction of approximately 109,000 metric tons per year from the full burn calculation cited above. I note that Transco provided slightly different estimates. Transco's February 27, 2019 Filing at 1 (displacing 900,000 barrels of oil reduces CO_2 emissions by 200,000 tons per year). I believe the Commission could and should provide guidance for certificate applicants about how to prepare these estimates in future proceedings.

[13] Transco's April 24, 2019 Filing at 2.

[14] National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.*

downstream data and the context is only the first step to assist the Commission in ascribing significance to a given rate or volume of GHG emissions as part of our climate change analysis. As a second step, the NEPA requires that we analyze that information to determine whether a specific impact is, in fact, significant. [15] Unfortunately, to date, the Commission has not established a framework for making a significance determination. I do not believe it is beyond the capability of this Commission to determine whether a given rate or volume of GHG emissions should be considered significant. The Commission has grappled with every other identifiable and measurable environmental impact; for example, we quantify, consider, and mitigate impacts to land, water, and species, and we make determinations on whether the impacts to wetlands or mussels are significant. For reasons that I do not find persuasive, the Commission treats climate impacts differently than all other environmental impacts in our environmental review, and refuses to make such determinations regarding climate change impacts. While it might be easier to assess significance if we had national emissions reduction targets, like EPA's Clean Power Plan or the Paris Climate Accord,[16] to use as part of our framework, the lack of such targets does not prevent the Commission from making a significance determination in this or in any other case. In fact, the Commission makes challenging determinations on quantitative and qualitative issues in many other areas of our work.[17]

---

[15] Under NEPA, when evaluating the significance of a particular impact, the Commission must consider both context and intensity. 40 C.F.R. § 1508.27(a) (2017) (Context means "that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests and the locality."). 40 C.F.R. § 1508.27(b) (2017) (Intensity refers to "the severity of the impact").

[16] The EPA's Clean Power Plan and the Paris climate account are pending repeal and withdrawal, respectively.

[17] Many of the core areas of the Commission's work have required the development of analytical frameworks, often a combination of quantitative measurements and qualitative assessments, to fulfill the Commission's responsibilities under its broad authorizing statutes. This work regularly requires that the Commission exercise judgment, based on its expertise, precedent, and the record before it. For example, to help determine just and reasonable returns on equity (ROEs) under the Federal Power Act, Natural Gas Act, and Interstate Commerce Act, the Commission identifies a proxy group of comparably risky companies, applies a method or methods to determine a range of potentially reasonable ROEs (i.e., the zone of reasonableness), and then considers various factors to determine the just and reasonable ROE within that range. *See also*, *e.g.*, *Promoting Transmission Investment through Pricing Reform*, Order No. 679, FERC Stats.

For these reasons, I respectfully concur.

_____
Cheryl A. LaFleur
Commissioner

& Regs. ¶ 31,222, *order on reh'g*, Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 (2006), *order on reh'g*, 119 FERC ¶ 61,062 (2007) (establishing Commission regulations and policy for reviewing requests for transmission incentives); *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth.* v. *FERC*, 762 F.3d 41 (D.C. Cir. 2014) (requiring, among other things, the development of regional cost allocation methods subject to certain general cost allocation principles); *BP Pipelines (Alaska) Inc.*, Opinion No. 544, 153 FERC ¶ 61,233 (2015) (conducting a prudence review of a significant expansion of the Trans Alaska Pipeline System). I also note that the Commission is currently considering a broad topic – resilience – whose scope and complexity might similarly require the development of new analytical frameworks for conducting the Commission's work.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC Docket No. CP17-101-000

(Issued May 3, 2019)

GLICK, Commissioner, *dissenting in part*:

1. I dissent in part from today's order because it violates both the Natural Gas Act[1] (NGA) and the National Environmental Policy Act[2] (NEPA). Once again, the Commission refuses to consider the consequences its actions have for climate change. Neither the NGA nor NEPA permit the Commission to assume away the climate change implications of constructing and operating this pipeline project. Yet that is precisely what the Commission is doing today.

2. In today's order, the Commission authorizes Transcontinental Gas Pipe Line Company's (Transco) proposed Northeast Supply Enhancement Project (Project), which will provide an additional 400,000 dekatherms per day of firm transportation service to residential and commercial customers in the New York City area.[3] Today's order suffers from two fatal flaws, both of which are a function of the Commission's continued refusal to consider the environmental consequences of natural gas infrastructure projects. First, the Commission again refuses to assess the significance of the Project's contribution to climate change, while at the same time asserting that the Project in its entirety will not have significant environmental impacts. In so doing, the Commission writes the Project's actual climate impacts out of its analysis. Second, the Commission refuses to identify or consider the Project's reasonably foreseeable impacts on upstream or downstream GHG emissions. Each flaw is sufficient in itself to render today's order inconsistent with the law, arbitrary and capricious, and not the product of reasoned decisionmaking.

I. The Commission's refusal to consider the significance of the Project's contribution to climate change is arbitrary and capricious.

3. We know with certainty what causes climate change: It is the result of GHG emissions, including carbon dioxide and methane, that can be released in large quantities

[1] 15 U.S.C. § 717f (2012).

[2] National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321 *et seq.*

[3] Northeast Supply Enhancement Project Final Environmental Impact Statement (EIS) at ES-1.

through the production, transportation, and the consumption of natural gas and other fossil fuels. The Commission recognizes this relationship in the record before us today, acknowledging that climate change is "driven by accumulation of GHG in the atmosphere" and that emissions from the Project's construction and operation, in combination with emissions from other sources, would "contribute incrementally to future climate change impacts."[4] It is therefore critical that the Commission carefully consider the Project's contribution to climate change, both in order to fulfill NEPA's requirements and to determine whether the Project is in the public interest under the NGA.[5]

4. Today's order misses that mark by a mile. The Commission insists that it need not consider whether the Project's contribution to climate change from increased GHG emissions[6] is significant because it lacks a "widely accepted standard" for doing so.[7] However, the shocking part of the Commission's rationale is what comes next. Based on this alleged inability to assess significance, the Commission concludes that the Project

[4] EIS at 4-387, 4-389.

[5] Section 7 of the NGA requires that, before issuing a certificate for new pipeline construction, the Commission must find both a need for the pipeline and that, on balance, the pipeline's benefits outweigh its harms. 15 U.S.C. § 717f (2012). Furthermore, NEPA requires the Commission to take a "hard look" at the environmental impacts of its decisions. *See* 42 U.S.C. § 4332(2)(C)(iii); *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983). This means that the Commission must consider and discuss the significance of the harm from a pipeline's contribution to climate change by actually evaluating the magnitude of the pipeline's environmental impact. Doing so enables the Commission to compare the environment before and after the proposed federal action and factor the changes into its decisionmaking process. *See Sierra Club v. FERC*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) (*Sabal Trail*) ("The [FEIS] needed to include a discussion of the 'significance' of this indirect effect."); 40 C.F.R. § 1502.16 (a)–(b) (An agency's environmental review must "include the environmental impacts of the alternatives including the proposed action," as well as a discussion of direct and indirect effects *and their significance*.) (emphasis added)).

[6] The EIS quantified the Project's GHG emissions from construction and operation. EIS at 4-309 – 4-310 & Tables 4.10.1-4 & 4.10.1-5.

[7] *See* EIS at 4-389 – 4-390 (explaining that "we cannot determine whether the NESE's Project's contribution [to cumulative impacts on climate change] would be significant," purportedly because "there is no widely accepted standard, per international, federal, or state policy, or as a matter of physical science, to determine the significance of the Project's GHG emissions").

will have no significant environmental impact.[8] That is the equivalent of concluding that an action known to be dangerous is actually safe because the majority claims not to know exactly how dangerous it is.[9] In addition to being ludicrous, that reasoning fails to give climate change the serious consideration it deserves and that the law demands.

5. The implications of the Commission's approach to evaluating the impacts of GHG emissions extend beyond this proceeding. Taking the Commission's approach to its logical conclusion, the Commission would approve any project regardless of the amount of GHGs emitted without ever determining the significance of their environmental impact. If the Commission continues to assume that a project will not have a significant environmental impact no matter the volume of GHG emissions it causes, those emissions and their consequences cannot meaningfully factor into the public interest determination. Approving a project that may significantly contribute to the harms caused by climate change without evaluating the significance of that impact or considering it as part of the public interest determination is contrary to law, arbitrary and capricious, and not the product of reasoned decisionmaking.[10]

6. In addition, the Commission's assertion that it cannot assess the significance of a project's contribution to climate change is itself not the product of reasoned decisionmaking. The claim that the Commission lacks a widely accepted standard for evaluating the significance of GHG emissions is a red herring. The lack of any single "standard" methodology does not prevent the Commission from adopting *a* methodology, even if others are available. In any case, the Commission has several tools to assess the

---

[8] *See, e.g.*, EIS at ES-14; *see also Transcontinental Gas Pipe Line Co., LLC*, 167 FERC ¶ 61,110, at P 29 (2019) (Certificate Order) (noting EIS conclusion that the Project's adverse environmental impacts will be reduced to less than significant levels through implementation of certain mitigation measures).

[9] *See, e.g.*, *Michigan v. EPA*, 135 S. Ct. 2699, 2706 (2015) ("Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.") (internal quotation marks omitted); *see also Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983) (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."); *cf. Soundboard Ass'n v. FTC*, 888 F.3d 1261, 1274 (D.C. Cir. 2018) (Millett, J., dissenting) ("Why let reality get in the way of a good bureaucratic construct?").

[10] As noted, the NGA "requires the Commission to evaluate all factors bearing on the public interest," *Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y.*, 360 U.S. 378, 391 (1959), which *Sabal Trail* held includes a facility's contribution to the harms caused by climate change, 867 F.3d at 1373.

harm from the Project's contribution to climate change. The Social Cost of Carbon, for example, measures the long-term damage inflicted by a ton of carbon dioxide. This tool provides the "hard look" required by NEPA, and gives both the Commission and the public a means to translate a discrete project's climate impacts into concrete and comprehensible terms.[11]

7. Besides particular methodologies, the Commission also can use its expertise and discretion to consider all factors and determine, quantitatively or qualitatively, whether the Project's GHG emissions have a significant impact on climate change. That is precisely what the Commission does in other aspects of its environmental review. Take, for example, the Commission's evaluation of the Project's impact on migratory birds. The EIS determined that 13.5 acres of upland forest and 2.6 acres of forested wetlands that serve as bird habitat would be permanently lost, yet found these impacts not significant.[12] Notwithstanding the lack of any "widely accepted standard"[13] as to this particular environmental impact, the Commission still uses its judgment to conduct a qualitative review of the Project's impact on bird habitat. The Commission's refusal to even attempt a similar qualitative judgment on the significance of GHG emissions is willfully ignorant, and certainly arbitrary and capricious.

---

[11] As the Environmental Protection Agency has explained, the Commission may use estimates of the Social Cost of Carbon "for project analysis when [the Commission] determines that a monetary assessment of the impacts associated with the estimated net change in GHG emissions provides useful information in its environmental review or public interest determination." United States Environmental Protection Agency, Comments, Docket No. PL18-1-000, at 4–5 (filed June 21, 2018). The Council on Environmental Quality also recognized under a prior administration that monetizing an impact is appropriate in the NEPA document, if doing so is necessary for an agency to fully evaluate the environmental consequences of its decisions. *See* 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 32-33 (Aug. 1, 2016), https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_guidance.pdf.

[12] EIS at 4-85 – 4-86, 5-9; *see also id.* at 4-64 & 4-68 (noting that recovery of forested wetlands "may take up to 30 years or more," but concluding that the Project would not result in significant impact on wetland resources).

[13] *See* EIS at 4-389 (referencing lack of a "widely accepted standard" for assessing the significance of GHG emissions).

II. The Commission's failure to identify the reasonably foreseeable indirect effects of the Project is arbitrary and capricious.

8. The Commission also ignores the Project's reasonably foreseeable GHG emissions from downstream combustion and upstream production. In so doing, the Commission adopts an overly narrow and circular definition of indirect effects and disregards the Project's central purpose—to facilitate natural gas consumption by residential and commercial customers in New York City.

9. With regard to downstream emissions, *Sabal Trail* held the reasonably foreseeable combustion of gas transported through a pipeline was an indirect effect.[14] There is no real question that the natural gas to be transported by the Project will be combusted. Indeed, the very purpose of the Project is to provide natural gas to residential and commercial customers in New York City.[15] Transco states in its application that it needs the Project "to meet customer demand in time for the 2019/2020 winter heating season."[16] And none of the Project's alleged benefits—improved reliability and access to economic supplies of natural gas—will occur unless the natural gas is actually used, and that use will largely (if not entirely) entail combustion.[17] In fact, as the Commission recognizes, Transco has stated in the record that the Project would transport natural gas to replace fuel oil heating systems in New York City, potentially displacing up to 900,000 barrels of oil per year.[18] But even with this record that demonstrates that the natural gas

---

[14] *See Sabal Trail*, 867 F.3d at 1371-72.

[15] Certificate Order P 90; EIS at ES-1, 1-3, 1-15.

[16] EIS at 1-15; *see also Sabal Trail*, 867 F.3d at 1371-72.

[17] *See* EIS at 1-3 (explaining that the purpose and need of the Project is to provide incremental interstate pipeline transportation service to Brooklyn Union Gas Company and KeySpan Gas East Corporation to serve National Grid's residential and commercial customers in New York City, ensure diverse sources of natural gas supply, and improve system reliability); Transco Certificate Application at 14 (noting National Grid's forecast of need for additional natural gas supply to meet "residential and commercial demands due to population and market growth within its service territory," in particular "beginning in the 2019/2020 heating season because current forecast models . . . indicate an increasing peak day demand year over year"); *see also* Jayni Hein *et al.*, Institute for Policy Integrity, *Pipeline Approvals and Greenhouse Gas Emissions* 25 (2019) (explaining that, in 2017, 97% of all natural gas consumed was combusted).

[18] Certificate Order P 90 (referencing Transco February 27 and April 24, 2019 filings); EIS at 4-389; *see also* Transco Letter at 2 (Apr. 24, 2019) (disclosing estimate of reduced GHG emissions from downstream combustion of Project capacity replacing No.

transported by the Project will be combusted, releasing GHG emissions, the Commission still refuses to acknowledge those downstream emissions as a reasonably foreseeable indirect effect of the Project.[19] The failure to consider that indirect effect is arbitrary and capricious.

10. The Commission's approach effectively confines *Sabal Trail* to its facts. Here, we know the location (New York City) and the end-use (a replacement heating source) of the natural gas to be transported, and yet the Commission mysteriously concludes that it cannot reasonably foresee the GHG emissions released when the gas is burned—which is, to my knowledge, the only way that natural gas is used to provide heating. The Commission appears to be taking the position that GHG emissions from burning natural gas will only be reasonably foreseeable if we know the specific power plant in which the gas will be used.[20] But nothing in *Sabal Trail* supports such a narrow and myopic view. Rather, the court's holding that downstream emissions were reasonably foreseeable was based on the purpose of that project—*i.e.*, transporting gas to Florida power plants so that gas can be burned.[21]

11. In any event, even if the Commission does not have exact information about the source or end use of the gas to be transported, it still can produce comparably useful information based on reasonable forecasts of the GHG emissions associated with

---

2 fuel oil).

[19] *See, e.g.*, *Sabal Trail*, 867 F.3d at 1372 ("It is just as foreseeable, and FERC does not dispute, that burning natural gas will release into the atmosphere the sorts of carbon compounds that contribute to climate change."); *WildEarth Guardians v. Zinke*, No. 16-1724 (RC), 2019 WL 1273181, at *18 (D.D.C. Mar. 19, 2019) (holding that the Bureau of Land Management was required to consider downstream GHG emissions as an indirect effect of oil and gas leasing because downstream use and resulting GHG emissions were reasonably foreseeable effects of oil and gas leasing); *San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, No. 16-cv-376-MCA-JHR, 2018 WL 2994406, at *10 (D.N.M. June 14, 2018) (holding that the agency's conclusion "that consumption is not 'an indirect effect of oil and gas production because production is not a proximate cause of GHG emissions resulting from consumption'" was arbitrary as well as "circular and worded as though it is a legal conclusion").

[20] *See, e.g.*, FERC Brief at 23-24, *Otsego 2000, Inc. v. FERC*, D.C. Cir. No. 18-1188 (filed Jan. 25, 2019).

[21] *Sabal Trail*, 867 F.3d at 1371-72 ("What are the 'reasonably foreseeable' effects of authorizing a pipeline that will transport natural gas to Florida power plants? First, that gas will be burned in those power plants. This is not just 'reasonably foreseeable,' it is the project's entire purpose, as the pipeline developers themselves explain.").

production and consumption. NEPA does not require exact certainty—rather, it requires only reasonable forecasting.[22] Forecasting environmental impacts is a regular component of NEPA reviews and a reasonable estimate may inform the federal decisionmaking process even where the agency is not completely confident in the results of its forecast.[23] Similar forecasts can play a useful role in the Commission's evaluation of the public interest, even in those instances when the Commission must make a number of assumptions in its forecasting process.[24]

12. The Commission's refusal to consider the significance of the reasonably foreseeable indirect effects of downstream emissions is particularly vexing here because the Commission notes—without any verification—the "hypothetical scenario" posited by Transco that would cause the Project to "more than offset net GHG emissions."[25]

13. If, instead of taking a results-oriented approach, the Commission had bothered to evaluate the Project's downstream emissions, it could have pointed out that Transco's hypothetical statement was just that—hypothetical. As Commissioner LaFleur notes in

---

[22] *See, e.g.*, *Sabal Trail*, 867 F.3d at 1374 ("[W]e have previously held that NEPA analysis necessarily involves some 'reasonable forecasting,' and that agencies may sometimes need to make educated assumptions about an uncertain future.") (citing *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1310 (D.C. Cir. 2014)); *see also Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989)).

[23] In determining what constitutes reasonable forecasting, it is relevant to consider the "usefulness of any new potential information to the decisionmaking process." *Sierra Club v. U.S. Dep't of Energy*, 867 F.3d 189, 198 (D.C. Cir. 2017) (quoting *Pub. Citizen*, 541 U.S. at 767).

[24] In comments submitted in the Commission's pending review of the natural gas certification process, the Environmental Protection Agency identified a number of tools the Commission can use to quantify the reasonably foreseeable "upstream and downstream GHG emissions associated with a proposed natural gas pipeline." These include "economic modeling tools" that can aid in determining the "reasonably foreseeable energy market impacts of a proposed project." U.S. Environmental Protection Agency, Comments, Docket No. PL18-1-000, at 3–4 (filed June 21, 2018) (explaining that the "EPA has emission factors and methods" available to estimate GHG emissions—from activities upstream and downstream of a proposed natural gas pipeline—through the U.S. Greenhouse Gas Inventory and the Greenhouse Gas Reporting Program); *see Certification of New Interstate Natural Gas Facilities*, Notice of Inquiry, 163 FERC ¶ 61,042 (2018).

[25] *See* Certificate Order P 90.

her concurring statement, even if we take Transco's assumption that the Project would result in conversion of 8,000 customers per year from heating oil to natural gas and displace 900,000 barrels of heating oil per year, it would only reduce the Project's downstream GHG emissions by a small amount.[26]

14. The Commission compounds this error by failing to evaluate how the Project's downstream emissions will impact climate change. By not considering any of the Project's downstream effects, there is no place to consider benefits from the Project.[27] While Commissioner LaFleur wrestled with the significance of the impact of the Project's downstream GHG emissions, her concurring statement does not remedy the Commission's refusal to evaluate the significance of the Project's contribution to climate change; nor can that concurrence remedy the Commission's assumption that, regardless of what that contribution is, the Project has no significant environmental impact.

15. The Commission's failure to evaluate upstream GHG emissions caused by the Project is equally frustrating. The Commission cannot ignore the fact that adding firm transportation capacity is likely to "spur demand" for natural gas.[28] As noted, one of the purposes of the Project is to expand the supplies of economic natural gas, which, by the law of supply and demand, ought to put downward pressure on the price of natural gas in the region, potentially increasing demand. Given this potential to affect upstream emissions, the Commission must at least examine the effects that an expansion of pipeline capacity might have on consumption and production.[29]

---

[26] Certificate Order, 167 FERC ¶ 61,110 (LaFleur, Comm'r, concurring at P 4).

[27] *Sabal Trail*, 867 F.3d at 1374-75 ("Nor is FERC excused from making emissions estimates just because the emissions in question might be partially offset by reductions elsewhere. . . . The effects an EIS is required to cover 'include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.' In other words, when an agency thinks the good consequences of a project will outweigh the bad, the agency still needs to discuss both the good and the bad.") (quoting 40 C.F.R. § 1508.8).

[28] *Barnes v. U.S. Dep't of Transp.*, 655 F.3d 1124, 1138 (9th Cir. 2011) (holding that it "is completely inadequate" for an agency to ignore a project's "growth inducing effects" where the project has a unique potential to spur demand); *id.* at 1139 ("[O]ur cases have consistently noted that a new runway has a unique potential to spur demand, which sets it apart from other airport improvements, like changing flight patterns, improving a terminal, or adding a taxiway, which increase demand only marginally, if at all.").

[29] *See, e.g.*, *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (when the "nature of the effect" (end-use emissions) is reasonably

* * *

16. Climate change poses an existential threat to our security, economy, environment, and, ultimately, the health of individual citizens. Unlike many of the challenges that our society faces, we know with certainty what causes climate change: It is the result of GHG emissions, including carbon dioxide and methane—which can be released in large quantities through the production and the consumption of natural gas. Congress determined under the NGA that no entity may transport natural gas interstate, or construct or expand interstate natural gas facilities, without the Commission first determining the activity is in the public interest. This requires the Commission to find, on balance, that a project's benefits outweigh the harms, including the environmental impacts from climate change that result from authorizing additional transportation. Accordingly, it is critical that, as an agency of the federal government, the Commission comply with its statutory responsibility to document and consider how its authorization of a natural gas pipeline facility will lead to the emission of GHGs, contributing to climate change.

For these reasons, I respectfully dissent in part.

_____

Richard Glick
Commissioner

---

foreseeable, but "its extent is not" (specific consumption activity producing emissions), an agency may not simply ignore the effect).