

185 FERC ¶ 61,130
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;
Allison Clements, and Mark C. Christie.

Transcontinental Gas Pipe Line Company, LLC
Columbia Gas Transmission, LLC

Docket Nos. CP22-502-000
CP22-503-000

ORDER ISSUING CERTIFICATES AND APPROVING ABANDONMENT

(Issued November 16, 2023)

1. On August 24, 2022, Transcontinental Gas Pipe Line Company, LLC (Transco) filed an application in Docket No. CP22-502-000, 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, operate, and maintain its Commonwealth Energy Connector Project (CEC Project) located in Mecklenburg, Brunswick, and Greensville Counties, Virginia. The CEC Project will enable Transco to provide an additional 105,000 dekatherms per day (Dth per day) of firm transportation service for Virginia Natural Gas, Inc. (Virginia Gas), a local distribution company.
2. Also on August 24, 2022, Columbia Gas Transmission, LLC (Columbia) filed an application in Docket No. CP22-503-000, pursuant to sections 7(b) and 7(c) of the NGA³ and Part 157 of the Commission's regulations, for authorization to abandon certain pipeline facilities and to construct and operate upgraded pipeline facilities as part of its Virginia Reliability Project, located in Sussex, Surry, Southampton, Isle of Wight, Greenville, and Prince George Counties, and the cities of Suffolk and Chesapeake, Virginia. Columbia will receive 100,000 Dth per day of natural gas from Transco, to be delivered through the facilities proposed in Docket No. CP22-502-000 above, for re-delivery to Virginia Gas for its markets.

¹ 15 U.S.C. § 717f(c).

² 18 C.F.R. pt. 157 (2022).

³ 15 U.S.C. §§ 717f(b), (c).

3. As discussed below, we grant the requested authorizations, subject to certain conditions.

I. Background

4. Transco⁴ and Columbia⁵ are both Delaware limited liability companies and natural gas companies, as defined by section 2(6) of the NGA.⁶ Transco operates natural gas transportation facilities that extend 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 New York City metropolitan area. Columbia operates approximately 12,000 miles of natural gas pipeline from New York State to the Gulf of Mexico. Columbia is authorized to do business in the states of Delaware, Georgia, Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Texas, Virginia, and West Virginia.

II. Proposals

A. Transco's CEC Project

5. Transco proposes to construct and operate the CEC Project to provide an additional 105,000 Dth per day of firm transportation service from Transco's existing Station 165 Zone 5 Pooling Point in Pittsylvania County, Virginia, through Transco's South Virginia Lateral to the existing Emporia Meter and Regulating (M&R) Station in Greensville County, Virginia, where the CEC Project will interconnect with Columbia's system.

6. Specifically, Transco proposes to:

- install a new 33,000 horsepower (hp) electric motor-driven compressor at Transco's Compressor Station 168 in Mecklenburg County, which would increase the compressor station's horsepower to 66,000 hp;
- install a 6.35-mile-long, 24-inch-diameter pipeline loop of Transco's South Virginia Lateral B-Line (Commonwealth Loop) and appurtenant facilities in Brunswick and Greensville Counties, including a new crossover valve and skid-mounted regulator valve (Commonwealth Loop Regulator); and

⁴ Transco is an indirect, wholly-owned subsidiary of the Williams Companies, Inc.

⁵ Columbia is an indirect, wholly-owned subsidiary of TC Energy Corporation.

⁶ 15 U.S.C. § 717a(6).

- modify and install new facilities at the existing Emporia M&R Station in Greensville County.

7. Transco states it held an open season from November 2, 2021, through November 23, 2021, to solicit interest in service on the CEC Project and simultaneously solicited offers to turn back capacity from existing firm shippers.⁷ No conforming offers to turn back capacity were received. Transco executed a binding precedent agreement with Virginia Gas for the entire 105,000 Dth per day of firm transportation service for a primary term of 20 years.⁸ Virginia Gas elected to pay negotiated rates. Transco states that Virginia Gas currently uses its existing propane-air peak-shaving facilities to meet some of Virginia Gas' demand⁹ and that the project capacity will allow Virginia Gas to retire its peak-shaving facilities while serving increasing market demand.¹⁰

8. Transco estimates the cost of the CEC Project will be \$117,709,858. It proposes a new incremental recourse rate designed to recover the cost of the proposed service.¹¹

B. Columbia's Virginia Reliability Project

9. Columbia proposes to construct and operate the Virginia Reliability Project to provide an additional 100,000 Dth per day of firm transportation service from the Emporia M&R Station to an existing delivery point in Chesapeake County, Virginia, to Virginia Gas.¹² Columbia asserts that the project will also enable it to replace and

⁷ Transco Application at 10.

⁸ See Transco Application, Ex. I.

⁹ *Id.* at 17.

¹⁰ Virginia Gas will replace approximately 70,000 Dth per day of capacity from its propane-air peak-shaving facilities with gas on CEC Project and use the remaining 30,000 Dth per day to meet incremental gas demand. *Id.* at 11, 17 and 20.

¹¹ See *id.*, Ex. K.

¹² Columbia's application also refers to the delivery point as Market Area 34 on its system. Columbia Application at 5. The 105,000 Dth per day of firm transportation service subscribed by Virginia Gas on the CEC Project will be used by Virginia Gas to provide 100,000 Dth per day of incremental natural gas deliverability for Virginia Gas' customers. The other 5,000 Dth per day of firm transportation service will be directed to other uses. Virginia Gas had previously subscribed for 2,300 Dth per day of long-term transportation service from the Emporia M&R Station to Norfolk on Columbia's system without acquiring corresponding any upstream capacity. See Columbia May 8, 2023 Data Response No. 1. To secure transportation for its upstream supply, Virginia Gas

upgrade existing pipeline facilities with new, more modern facilities allowing it to provide continued safe and reliable natural gas transportation service, as well as additional flexibility¹³ to existing customers. As part of the project, Columbia proposes to:

- replace 49.2 miles of 12-inch-diameter pipeline (VM-107 and VM-108)¹⁴ with 24-inch-diameter pipeline in Sussex, Surry, Southampton, and Isle of Wight Counties, and the cities of Suffolk and Chesapeake;
- install a new 5,500-hp electric/natural gas hybrid compressor unit¹⁵ and appurtenant facilities at its existing Emporia Compressor Station in Greenville County, which would increase the station horsepower to 6,800 hp;
- modify the existing compressor units and increase the station horsepower by 2,700 hp to 8,200 hp at its existing Petersburg Compressor Station in Prince George County;
- modify the Emporia Point of Receipt in Greenville County, Regulator Station 7423 in Prince George County, and MS-831010 Point of Delivery in the city of Chesapeake; and

requested that Transco include an additional 2,300 Dth per day of firm transportation service on the CEC Project. *See id.* An additional 2,700 Dth per day of incremental firm transportation service on Transco will be used to transport gas for downstream pipeline fuel consumption on Columbia's system. Transco Application at 12; *see also* Columbia May 8, 2023 Data Response No. 1.

¹³ Columbia states that the additional line pack created by the project will improve overall system performance and flexibility during normal and peak day operations. Columbia Application at 21-22.

¹⁴ The VM-107 pipeline segment is 25.6 miles long and the VM-108 pipeline segment is 23.6 miles long.

¹⁵ The new hybrid unit, which would run on electricity during normal operating conditions and would run on gas in abnormal operating conditions (e.g., power outages), would be the primary unit for providing service. Columbia intends to use the two existing 650-hp gas-driven compressor units at the Emporia Compression Station to enhance flexibility. Columbia Application at 8 & n.10.

- modify other appurtenant facilities.¹⁶

10. As part of the Virginia Reliability Project, Columbia requests authorization pursuant to section 7(b) of the NGA to abandon certain pipeline facilities. While most of the pipeline replacement associated with the Virginia Reliability Project involves removing Columbia's existing pipeline and installing a new pipeline in the same trench, Columbia proposes to abandon existing pipeline in place in areas where the replacement pipeline will be installed in a new trench.¹⁷ Columbia also proposes to abandon by removal several aboveground facilities located along the VM-107 pipeline.¹⁸

11. Columbia held a binding open season from September 27, 2021, through October 15, 2021, soliciting firm transportation service on the Virginia Reliability Project. Columbia also solicited but received no conforming offers for turnback capacity from its existing firm transportation customers. As a result of the open season, Columbia executed a binding precedent agreement with Virginia Gas for the entire 100,000 Dth per day of firm transportation service for a 20-year term. Virginia Gas elected to pay negotiated rates.

12. Columbia estimates the cost of the Virginia Reliability Project to be \$917,925,527.¹⁹ Columbia proposes to allocate \$310,799,256 of the total project costs to be recovered through a new incremental reservation rate under its Rate Schedule FTS-VRP for the incremental firm transportation service on the Virginia Reliability Project.²⁰ Columbia asserts that the Commission should grant a pre-determination that it may roll the rest of the project costs, \$607,126,271, into its existing system rates in a future NGA section 4 rate case.

III. Notice, Interventions, Protests, and Comments

13. Notice of Transco's and Columbia's applications was published in the *Federal Register* on September 15, 2022, establishing September 29, 2022, as the deadline for

¹⁶ For example, replacing valve settings, installing five new pig launchers and receiver settings; and replacing existing pipeline tie-ins to accommodate the new larger diameter pipeline. *See id.* at 9.

¹⁷ *See id.*, Resource Report 1 at 1-16 to 1-18 & tbl. 1-5.

¹⁸ These facilities include feed pipeline and valves at the Suffolk 2 M&R Station, four cross-over valves, and a blowoff valve. *See id.*, Resource Report 1 at 1-18.

¹⁹ *Id.*, Ex. K at 1; Columbia Apr. 13, 2023 Data Response, attach. 1.

²⁰ Columbia Application, Ex. P.

filing comments and interventions.²¹ Parties identified in Appendix A to this order filed timely, unopposed interventions in these proceedings.²²

14. The Cities of Charlottesville and Richmond, Virginia, (the Cities) and Exelon Corporation (Exelon) filed protests, contesting Columbia's proposal to allocate project costs between the expansion shipper and existing shippers and the need to replace 49 miles of existing pipeline. Columbia filed an answer in response to the Cities and Exelon's protest, which led to additional answers filed by Exelon Corporation.²³ Rule 213(a)(2) of the Commission's Rules of Practice and Procedures prohibits answers to protests unless otherwise ordered by the decisional authority;²⁴ however, we accept all the answers because they informed our decision-making process.

15. Antero and EQT filed comments requesting that the Commission require more information from Columbia to justify its cost allocation and pipeline replacement proposals. In addition, comments were submitted opposing or supporting the projects.

IV. Discussion

16. Because the proposed facilities will be used to transport natural gas in interstate commerce subject to the Commission's jurisdiction, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.²⁵ In addition, Columbia's proposed abandonment of certain facilities is subject to the requirements of section 7(b) of the NGA.²⁶

²¹ 87 Fed. Reg. 56,650 (Sept. 15, 2022).

²² Timely, unopposed motions to intervene and notices of intervention are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(a)(2) and (c).

²³ Columbia also filed answers in response to comments by Antero Resources Corporation and MU Marketing LLC (Antero) and motions by EQT Energy LLC (EQT), both of which requested that the Commission require Columbia to file additional information to justify its proposal.

²⁴ 18 C.F.R. § 385.213(a)(2).

²⁵ 15 U.S.C. § 717f(c), (e).

²⁶ *Id.* § 717f(b).

A. Abandonment of Columbia’s Jurisdictional Facilities

17. Section 7(b) of the NGA provides that an interstate pipeline company may abandon jurisdictional facilities or services only if the Commission finds the abandonment is permitted by the present or future public convenience or necessity.²⁷ In deciding whether a proposed abandonment is warranted, the Commission considers all relevant factors, but the criteria vary with the circumstances of the particular proposal.²⁸ Continuity and stability of existing services are the primary considerations in assessing whether the public convenience or necessity allow the abandonment.²⁹ If the Commission finds that an applicant’s proposed abandonment will not jeopardize continuity of existing gas transportation services, the Commission generally will find that the public convenience or necessity permits the abandonment.³⁰

18. Here, Columbia proposes to abandon by replacement and abandon in place jurisdictional pipeline facilities. Because the proposed abandonment will facilitate the construction and operation of the Virginia Reliability Project and will not jeopardize continuity of existing natural gas transportation service,³¹ we find that the public convenience or necessity permits the abandonment.

B. Certificate Policy Statement

19. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.³² It establishes criteria for determining whether there is a

²⁷ *Id.* § 717f(c).

²⁸ *El Paso Nat. Gas Co.*, 148 FERC ¶ 61,226, at P 11 (2014).

²⁹ *Nat’l Fuel Gas Supply Corp.*, 160 FERC ¶ 61,050, at P 17 (2017) (citing *El Paso*, 148 FERC ¶ 61,226 at P 12).

³⁰ *See, e.g., Tex. E. Transmission, LP*, 176 FERC ¶ 61,206, at P 11 (2021) (citing *Trunkline Gas Co.*, 145 FERC ¶ 61,108, at P 65 (2013)).

³¹ *See, e.g., Transcontinental Gas Pipe Line Co., LLC*, 182 FERC ¶ 61,006, at PP 16-17 (2023); *Columbia Gas Transmission, LLC*, 156 FERC ¶ 61,125, at PP 10-12 (2016).

³² *Certification of New Interstate Nat. Gas Pipeline Facilities*, 88 FERC ¶ 61,227, *corrected*, 89 FERC ¶ 61,040 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement). On March 24, 2022, the Commission issued an order converting the policy statements issued in February 2022 to draft policy statements. *Certification of New Interstate Nat. Gas Facilities*, 178 FERC

need for a proposed project and whether the proposed project will serve the public interest. It 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 give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

20. Under this policy, the threshold requirement for applicants proposing new projects is that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, and landowners and communities affected by the route 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.

1. No Subsidy Requirement and Project Need

21. Transco's and Columbia's proposals satisfy the threshold requirement that they financially support their project without relying on subsidization from their existing customers.

a. Transco's CEC Project

22. As discussed below, we approve Transco's proposal to charge an incremental recourse rate under its Rate Schedule FT for firm transportation service using the incremental capacity created by the CEC Project. The Commission has determined that, in general, where a pipeline proposes to charge incremental rates for new construction that are higher than the company's existing system rates, the pipeline satisfies the threshold requirement that existing shippers will not subsidize the project.³³ Because Transco proposes to charge incremental rates for service on the proposed facilities that

¶ 61,197 (2022) (Order on Draft Policy Statements).

³³ See, e.g., *Transcontinental Gas Pipe Line Co., LLC*, 184 FERC ¶ 61,066, at P 12 (2023).

are higher than existing system rates, we find that Transco's existing shippers will not subsidize the CEC Project.

23. Transco entered into a 20-year precedent agreement with Virginia Gas, a non-affiliated shipper, for 105,000 Dth per day of firm transportation service or 100% of the project's capacity. The project capacity will enable Virginia Gas to meet growing demand for natural gas from its residential, industrial, and commercial customers in southeastern Virginia.³⁴ A precedent agreement for 100% of the project's capacity is significant evidence of the need for the proposed project.³⁵

b. Columbia's Virginia Reliability Project

24. Columbia proposes to allocate the costs of the Virginia Reliability Project between existing shippers (\$607,126,271 for costs associated with replacing and enhancing services for existing customers) and the expansion shipper, Virginia Gas (\$310,799,256 for costs associated with creating incremental capacity). As discussed in the Rates section below, for service using the incremental capacity created by the project, Columbia proposes to establish incremental firm recourse rates under Rate Schedule FTS-VRP, which are designed to recover all the costs allocated to the expansion component of the project and are higher than the existing applicable system rates.³⁶ The Commission has determined that, in general, where a pipeline proposes to charge incremental rates for new construction serving new incremental load, the pipeline has satisfied the threshold requirement that existing shippers will not subsidize the project.³⁷

25. Additionally, we find that Columbia has demonstrated a need for the incremental capacity created by the Virginia Reliability Project. The project expansion facilities are designed to enable Virginia Gas, which is not affiliated with Columbia, to meet the growing demand for natural gas of its residential, industrial, and commercial customers in southeastern Virginia, which is evidenced by a binding precedent agreement with Virginia Gas for 100% of the project's expansion capacity. We find this is evidence of the need for the incremental capacity provided by the project.³⁸

³⁴ Virginia Gas Sept. 23, 2022 Comment at 1; Transco Application at 12-13.

³⁵ See, e.g., *N. Nat. Gas Co.*, 184 FERC ¶ 61,186, at P 14 (2023).

³⁶ Columbia Application at 15-16.

³⁷ See, e.g., *Tenn. Gas Pipeline Co, LLC*, 179 FERC ¶ 61,041, at P 13 (2022).

³⁸ See, e.g., *Tex. Gas Transmission, LLC*, 181 FERC ¶ 61,049 (2022) (finding a long-term precedent agreement for almost 100% of the project's capacity is significant evidence of need for the proposed project); *Enable Gas Transmission, LLC*, 175 FERC

26. As for the replacement costs, the Certificate Policy Statement recognizes the appropriateness of rolled-in rate treatment for projects constructed to maintain or improve service to existing customers.³⁹ By replacing the segments of existing pipelines VM-107 and VM-108 proposed for abandonment with new pipeline segments, Columbia asserts existing shippers will benefit from enhanced system reliability and operational flexibility.⁴⁰

27. Antero, EQT, Exelon and the Cities question whether there is a need to replace the existing facilities.⁴¹ The Cities point out that Columbia identifies no outages, incidents, or other problems related to operating the VM-107 and VM-108 pipelines.⁴² Antero and EQT argue that the application makes no attempt to demonstrate that replacement of the VM-107 and VM-108 pipelines is necessary to provide existing services.⁴³ Exelon, EQT, and the Cities allege that the only identified need for replacing the existing pipeline facilities is to facilitate the expansion, which benefits a single customer.⁴⁴ Antero states

¶ 61,183, at P 30 (2021) (finding a long-term precedent agreement for approximately 67% of the project's capacity demonstrated a need for the proposed project); *Double E Pipeline, LLC*, 173 FERC ¶ 61,074, at P 35 (2020) (finding the 10-year, firm precedent agreements for approximately 74% of the project's capacity adequately demonstrated that the project was needed).

³⁹ See Certificate Policy Statement, 88 FERC at 61,746 n.12, *clarifying order*, 90 FERC at 61,392 (explaining “where a project combines an expansion with improvements to existing services, a pipeline can file to increase existing customers’ rates when the pipeline can demonstrate that the new facilities are needed to improve service to existing customers”) and 61,394 (further explaining “[p]ipelines can file to include additional costs in calculating the rates charged existing customers if the facilities are needed to improve service for existing customers, the increase in rates is related to the improvements in service, and raising existing customers’ rates does not constitute a subsidy of an expansion by the existing customers.”).

⁴⁰ Columbia Application at 21.

⁴¹ Antero Sept. 29, 2022 Comment at 1-3; EQT Sept. 29, 2022 Motion to Intervene and Comments at 3-5; Cities Sept. 29, 2022 Motion to Intervene and Protest at 3-6.

⁴² Cities Sept. 29, 2022 Motion to Intervene and Protest at 6.

⁴³ Antero Sept. 29, 2022 Comment at 2; EQT Sept. 29, 2022 Motion to Intervene and Comments at 3.

⁴⁴ Exelon Sept. 29, 2022 Protest at 2; EQT Sept. 29, 2022 Motion to Intervene and Comments at 3; and the Cities Sept. 29, 2022 Motion to Intervene and Protest at 6.

that, although Columbia proposes to allocate two-thirds of the project's costs to existing shippers, it has not provided any detail or explanation regarding the need for replacing the pipeline facilities.⁴⁵ Collectively, they argue that if Columbia cannot articulate a specific reason why the replacement is necessary, existing shippers should not be allocated the costs associated with the replacement of the existing pipeline; rather, those costs should instead be allocated to the expansion shipper.

28. Columbia filed reply comments asserting that it is necessary and appropriate to replace the pipelines at this time because the replacement will provide system integrity and reliability benefits and that its proposal is fully consistent with standards developed by the Commission.⁴⁶ Columbia further states that the pipelines proposed for replacement were installed between 1951 and 1959 and manufactured with a Low Frequency Electric Resistance Welded long seam, which is an outdated welding process that creates manufacturing flaws and steel hard spot flaws. Columbia also states that the existing pipelines were coated with coal-tar enamel that carries an increased risk of external corrosion.⁴⁷ Furthermore, Columbia states that in-line inspection⁴⁸ is not possible on the section of line VM-108 that is proposed for replacement, which is problematic given that it includes one high consequence area that will need additional inspections in the future.⁴⁹ Previous integrity inspections of segments of VM-107 and VM-108 have identified shorted casings, dents, and external corrosion, requiring further investigation and remediation.⁵⁰

⁴⁵ Antero Sept. 29, 2022 Comment at 2-3.

⁴⁶ Columbia Oct. 14, 2022 Answer at 5-6 (referencing examples where the Commission has approved replacements that improve efficiency, *see, e.g., Columbia Gulf Transmission Co.*, 93 FERC ¶ 62,156, at 64,253 (2000); optimize performance, *see, e.g., ANR Pipeline Co.*, 108 FERC ¶ 61,179, at P 18 (2004); and provide flexibility in managing the movement of gas inventory, *see, e.g., Dominion Transmission, Inc.*, 115 FERC ¶ 62,233, at 64,985 (2006)).

⁴⁷ Columbia Oct. 14, 2022 Answer at 6.

⁴⁸ In-line inspection technique is a form of non-destructive preventive inspection for the purpose of pipeline maintenance to determine the possibility of corrosion, erosion, cracks in metal walls inside the pipeline, and other types of damage that can potentially lead to catastrophic damage to pipeline structures.

⁴⁹ Columbia Oct. 14, 2022 Answer at 6; Columbia Oct. 4, 2023 Data Response No. 3.

⁵⁰ Columbia Oct. 14, 2022 Answer at 7.

29. Columbia states that the proposed replacement lines will be more reliable and less susceptible to integrity driven outages that would increase operational costs over time.⁵¹ It also argues that the replacement of these lines will result in benefits to system flexibility. Columbia states that increasing the diameter of the VM-107 and VM-108 pipelines to 24-inch diameter pipe will result in reduced pressure loss along the path, which would reduce the need for Columbia to install additional compression on its system.⁵² It also asserts that the larger diameter pipe allows for additional system line pack, which increases the gas inventory available for operations.⁵³ Based on system maximum allowable operating pressures, Columbia estimates that replacement of the pipelines as part of the Virginia Reliability Project will increase line pack by up to 50%, which will reduce the number of service interruptions for commercial and industrial customers, particularly during cold days.⁵⁴

30. The record supports a finding that replacing the proposed pipeline facilities will provide existing customers service that is more reliable and less susceptible to integrity-driven outages. Furthermore, the integrity inspections that have revealed shorted casings, dents, and external corrosion⁵⁵ support a finding that remediation or replacement of the existing facilities is needed. As explained above, the pipelines proposed for replacement were constructed using outdated construction techniques, resulting in manufacturing flaws that could lead to unplanned and planned outages on the system. Columbia has provided persuasive evidence that the facilities proposed to be replaced have experienced corrosion and anomalies that make them prone to future failures and require upgrades to permit inline inspections. Based on the foregoing, we find that Columbia has adequately demonstrated that there is a need to replace the proposed pipeline facilities. Because Columbia has justified a need for the proposed pipeline replacements and shown that existing shippers will receive improved service, we

⁵¹ Columbia states that the existing pipe was manufactured by Youngstown Steel and that risks associated with this pipe vintage, manufacturer, and welding process include seam manufacturing flaws and steel hard spot flaws. Columbia Apr. 13, 2023 Data Response No. 6.

⁵² Columbia Oct. 14, 2022 Answer at 7.

⁵³ *Id.* Line pack is the volume of gas contained within a pipeline system. Pipelines rely on line pack to match the time-varying demands of their shippers and the supply of natural gas that generally gets injected into the pipeline at a consistent rate through the day.

⁵⁴ Columbia Mar. 14, 2023 Corrected Answer at 7-8.

⁵⁵ *Id.* at 10.

find that it is not a subsidy for Columbia's existing shippers to pay for services that benefit them as result of the Virginia Reliability Project.

2. Impacts on Existing Customers, Existing Pipelines and Their Customers, and Landowners and Surrounding Communities

a. Transco's CEC Project

31. We find that Transco's CEC Project will not adversely affect service to its existing shippers, or other pipelines and their captive customers. Transco designed the proposed expansion facilities to provide incremental service to meet the needs of the project shipper, Virginia Gas, while maintaining existing services. Virginia Gas will use the project's capacity, together with that of Columbia's Virginia Reliability Project, to serve the incremental growth requirements of its market, not to displace existing service providers. Finally, no pipelines or their captive customers have objected to Transco's proposal.

32. The proposed project will have minimal adverse economic impacts on landowners and surrounding communities. To the maximum extent possible, the proposed facility modifications and additions will be located on existing rights-of-way or areas adjacent to these rights-of-way.⁵⁶ For example, the installation of the new compressor unit at Transco's Compressor Station 168 would occur in a previously disturbed area. Overall, the total acreage needed to construct the CEC Project is 163.4 acres and Transco will maintain about 2.0 acres, in addition to Transco's existing permanent right-of-way, for operation of the CEC Project.⁵⁷ Therefore, we are satisfied that Transco has taken appropriate steps to minimize adverse economic impacts on any landowners and communities affected by the CEC Project.

b. Columbia's Virginia Reliability Project

33. We find that the Virginia Reliability Project will not adversely affect service to Columbia's existing customers since the project will, in part, improve reliability and flexibility on Columbia's existing system and will increase firm transportation capacity to fulfill the Virginia Gas's transportation needs without degrading service to Columbia's existing customers. We also find that there will be no adverse impact on other pipelines in the region or their captive customers. Virginia Gas intends to use the additional gas service to meet the incremental demand of peak-day gas requirements and is not displacing existing service on other pipelines.

⁵⁶ Transco Application at 17.

⁵⁷ Final EIS at 2-20.

34. The total acreage to be disturbed for construction of the Virginia Reliability Project is 809.9 acres, of which 246.2 acres of construction workspace would be located within existing and previously disturbed pipeline rights-of way.⁵⁸ Project operations would affect 306.2 acres of land, which includes 11.5 acres of land that would be used to operate aboveground facilities.⁵⁹ Columbia states that, to the extent practicable, it will construct and modify project facilities using existing rights-of-way or facility sites.⁶⁰ About 92% of the replacement pipeline route will be located parallel to Columbia's existing right-of-way or other existing pipeline, utility, railroad, or road right-of-way.⁶¹ We are satisfied that Columbia has taken appropriate steps to minimize adverse economic impacts on any landowners and communities affected by the Virginia Reliability Project.

35. In sum, we find that Transco and Columbia have demonstrated a need for their respective projects and, further, that the projects will not have adverse impacts on existing shippers or other pipelines and their existing customers and that each project's benefits will outweigh any adverse economic effects on landowners and surrounding communities. Therefore, we conclude that the projects are consistent with the criteria set forth in the Certificate Policy Statement and analyze the environmental impacts of the projects below.⁶²

C. Engineering Analysis

1. The Virginia Reliability Project is Appropriately Sized

36. Antero and EQT contend that Columbia's design of the Virginia Reliability Project facilities, specifically the use of a 24-inch pipeline, results in a project larger than what is required to provide firm transportation service to Virginia Gas while maintaining service to the existing shippers and thus, Columbia appears to be pre-building for a future expansion.⁶³ Specifically, Antero claims that the project would create more capacity than

⁵⁸ Final EIS at 2-5.

⁵⁹ *Id.* at 2-6.

⁶⁰ Columbia Application at 24.

⁶¹ Final EIS at 2-6.

⁶² See Certificate Policy Statement, 88 FERC at 61,745-46 (explaining that only when the project benefits outweigh the adverse effects on the economic interests will the Commission then complete the environmental analysis).

⁶³ Antero Feb. 27, 2023 Supplemental Comment at 1; EQT Sept. 29, 2022 Motion to Intervene and Comment at 3-4; EQT Feb. 27, 2023 Supplemental Comment at 5-6.

Columbia stated in its application, and filed hydraulic models of the proposed facilities to support this contention.⁶⁴

37. Columbia replies that Antero's analysis does not reflect local operational considerations, including the operational reserve that Columbia maintains to ensure that it can provide reliable service.⁶⁵ As a result, Columbia states Antero's analysis does not reflect operating realities of Columbia's system. In particular, Columbia explains that the receipt and delivery quantities reflected in its Exhibit G diagrams only reflect Columbia's firm contractual obligations based on existing and proposed service agreements.⁶⁶ Columbia explains that its design models incorporate an operational reserve, or "flex," to ensure that it is able to maintain reliable service under a variety of operating conditions.⁶⁷ Columbia states that operational reserve is not transportation capacity;⁶⁸ rather, it is capacity which enables Columbia to address local operational considerations, such as the small amount of usable line pack currently available in the affected project area, distance from Columbia's storage network and from interconnections with other supply sources, and the fact that loads in this area are end-use loads that are prone to high levels of hourly variation. Columbia states it can use the operational reserve to adapt to changing hourly conditions in a part of its system that has physical characteristics that challenges its ability to reliably manage variations, thus ensuring operational flexibility on its system.

38. Pipelines operate in dynamic environments that frequently require quick responses to rapidly changing situations. Specifically, Columbia references imbalances created by electric generator and local distribution company shippers during high demand cold days that Columbia must overcome while still providing reliable service to other shippers on its system.⁶⁹ We find that Antero's models, which only reflect Columbia's firm

⁶⁴ Antero Feb. 27, 2023 Supplemental Comment, Ex. No. ANT-0001. Antero explains that its modeling shows that Columbia's proposed facilities would create a total of 164,000 Dth per day of incremental mainline capacity, 64% greater than the 100,000 Dth per day of capacity necessary to support the project requirements, and that the pipeline replacement facilities had the potential to create a total of between 199,000 Dth per day and 238,000 Dth per day of pipeline capacity with minimal horsepower additions at Columbia's Petersburg Compressor Station. *Id.*, Ex. No. ANT-0001 at 2.

⁶⁵ Columbia Mar. 14, 2023 Corrected Answer at 4.

⁶⁶ *Id.* at 5.

⁶⁷ *Id.*, Ex. No. TCO-0001 at P 5.

⁶⁸ *Id.*

⁶⁹ Columbia Oct. 14, 2022 Answer at 8.

contractual obligations, did not include consideration of peak day variations that could occur in the market area, and therefore failed to consider the transient operating realities on Columbia's system. Based on the information provided in Columbia's data responses, and Commission staff's review of both Columbia's and Antero's modeling, we find that Columbia's design assumptions and modeling approach properly reflect operating conditions on its system and that its project is appropriately sized.

2. Antero's Alternatives

39. Antero argues that Columbia could more than double the capacity on the replacement facilities by adding compressor horsepower at the Petersburg Compressor Station without needing to increase the pipeline diameter.⁷⁰ This assumption, however, is not supported by the operating realities on Columbia's system. As Columbia explains in its affidavit, available transportation capacity in the project area, Columbia's Market Area 34, is ultimately defined by the maximum throughput that can flow across restricted facilities and/or bottlenecks along the project path.⁷¹ Columbia states there is currently no unsubscribed firm capacity available at any point of receipt across Columbia's Market Areas 33 and 34 that could potentially be used to deliver into any segmented mainline capacity south of the Petersburg Compressor Station once the project goes into service.⁷²

40. Antero further provides two alternative configurations of the project that would provide 100,000 Dth per day of new incremental capacity but would be less expensive and involve less land disturbance than Columbia's proposal.⁷³ Specifically, Antero contends that Columbia could: (1) replace the approximately 49 miles of the existing 12-inch-diameter pipeline with 20-inch-diameter pipeline rather than the proposed 24-inch-diameter pipeline; or (2) replace only 35 miles of the existing 12-inch-diameter pipeline with 24-inch pipeline instead of all 49 miles.⁷⁴

41. Columbia responds that it used sensitivity analyses to evaluate the possibility of using 20-inch-diameter instead of 24-inch-diameter pipeline and rejected the alternative. It explains that the 20-inch-diameter pipeline alternative would not provide Columbia with sufficient line pack to ensure that it could maintain existing pressure commitments and avoid degradation of system performance in the event of significant peak day

⁷⁰ Antero Feb. 27, 2023 Supplemental Comment at 2-3.

⁷¹ Columbia Mar. 14, 2023 Corrected Answer, Ex. No. TCO-001 at P 9.

⁷² *Id.*

⁷³ Antero Feb. 27, 2023 Supplemental Comment at 4-6.

⁷⁴ *Id.* at 4-5; Ex. No. ANT-0001 at P 31.

variations.⁷⁵ In addition, Columbia states that utilizing a smaller diameter pipeline, as proposed by Antero, would require increased running hours and horsepower utilization at the Petersburg Compressor Station.⁷⁶

42. In response to Antero's proposed 35-mile-long, 24-inch-diameter alternative (i.e., reduce pipeline replacement by 14 miles),⁷⁷ Columbia explains that any 12-inch-diameter pipeline segment left along the pipeline path would consistently operate at high gas velocities and would experience more frequent pressure fluctuation cycles due to overall lower available line pack.⁷⁸ Moreover, the 12-inch-diameter segment would encounter higher natural gas temperatures caused by incremental discharge pressures at the Petersburg Compressor Station.⁷⁹

43. Columbia filed six comparison hydraulic models reflecting the proposed project using a 20-inch-diameter replacement pipeline and 24-inch-diameter replacement pipeline. Commission staff reviewed these hydraulic models and concluded that they support Columbia's assertions regarding pressure profile, system line pack, and horsepower requirements at Petersburg Compressor Station. We agree.

D. Rates

1. Transco's CEC Project

a. Incremental Recourse Rates

44. Transco proposes an incremental recourse rate under its Rate Schedule FT for the recovery of the costs attributable to the project facilities. Transco proposes a daily incremental firm recourse reservation charge of \$0.56252 per Dth and an applicable usage charge of \$0.00486 per Dth based on a 100% load factor. Transco calculated its proposed incremental firm recourse reservation charge using a first-year fixed cost of service of \$21,558,569 and an annual design capacity equivalent to the annual contract capacity of 38,325,000 Dth.⁸⁰ Transco calculated its incremental usage charge of

⁷⁵ Columbia Mar. 14, 2023 Corrected Answer at 7.

⁷⁶ *Id.* at 8.

⁷⁷ Antero argues that reducing the replacement by 14 miles could save shippers over \$173 million. Antero Feb. 27, 2023 Comment at 6.

⁷⁸ Columbia Oct. 14, 2022 Answer at 8.

⁷⁹ *Id.*

⁸⁰ Transco Application, Ex. P at 1.

\$0.00486 per Dth using first-year variable costs of \$186,386 and annual throughput of 38,325,000 Dth. Transco's proposed incremental charges are based on cost-of-service factors approved by the Commission, including an onshore transmission depreciation rate (inclusive of negative salvage) of 2.50%, a pre-tax return of 12.83%, which reflects a 12.50% return on equity, the current federal corporate income tax rate of 21%, and state income tax rate of 6.60%.⁸¹

45. We have reviewed Transco's proposed cost of service and initial incremental rates and find that they are consistent with current Commission policy. 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.⁸² Transco's proposed incremental daily reservation charge for the CEC Project of \$0.56252 per Dth plus the proposed usage charge of \$0.00486 per Dth (total of \$0.56738 per Dth) is higher than Transco's current Rate Schedule FT, Zone 5-5, system maximum daily reservation charge of \$0.18481 per Dth plus the system maximum usage charge of \$0.00632 per Dth (total of \$0.19113).⁸³ Therefore, we approve the proposed incremental firm rate for service on the project. In addition, Transco is directed to charge the applicable system interruptible rate for interruptible service using the expansion capacity.

b. Fuel Retention and Electric Power Rates

46. Transco proposes to charge its generally-applicable system fuel retention and electric power rates to the CEC Project and therefore requests a pre-determination of rolled-in rate treatment of the proposed facilities' fuel consumption. To support this proposal, Transco submitted a fuel study that modeled the impact of the CEC Project on system compressor fuel and electric power consumption at facilities on Transco's South Virginia Lateral. Transco states that the fuel study used a representative sampling of daily volume traversing the CEC Project path for a 365-day period between January 1, 2021 and December 31, 2021, and selected 10 days from this period that are "representative of the range of system operating conditions" had the CEC Project

⁸¹ *Id.* at 14 & Ex. P. Transco states that the 2.50% onshore depreciation rate, 12.83% pre-tax return, and federal and state income tax rates were agreed upon in the Stipulation and Agreement (Settlement) approved by the Commission on March 24, 2020, in Docket Nos. RP18-1126-000, *et al.* See *Transcontinental Gas Pipe Line Co., LLC*, 170 FERC ¶ 61,245 (2020). Transco notes that the 12.83% pre-tax return is consistent with its initial rates filed for its Leidy South Project, its first expansion project subsequent to its Settlement. Transco Application at 14 & n.13.

⁸² Certificate Policy Statement, 88 FERC at 61,745.

⁸³ See Transco Jan. 31, 2023 Data Response.

facilities been in service.⁸⁴ Transco contends that, as a result of this study, the CEC Project would result in an overall 1.81% reduction in system fuel use attributable to existing system customers.⁸⁵ Because the CEC Project would yield a net system fuel benefit to the existing system customers without subsidization, we approve Transco's proposal to charge its generally-applicable system fuel retention percentage and system electric power rates for the CEC Project. Further, the Commission grants Transco a predetermination that the gas fuel and electric power costs associated with the CEC Project will qualify for rolled-in treatment in a future general NGA section 4 rate filing, absent a significant change in circumstances.

c. Reporting Incremental Costs

47. 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.⁸⁶ Therefore, we require Transco to keep separate books and accounting of costs and revenues attributable to the incremental capacity created by the CEC Project as required by section 154.309 of the Commission's regulations.⁸⁷ The books should be maintained with applicable cross-reference and the 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. 710.⁸⁸

d. Negotiated Rates

48. Transco proposes to provide firm transportation service to Virginia Gas on the CEC Project under a negotiated rate transportation agreement. Transco must file either its negotiated rate agreement or tariff records setting forth the essential terms of the

⁸⁴ Transco Application, Ex. Z-1.

⁸⁵ *Id.*

⁸⁶ 18 C.F.R. § 154.309.

⁸⁷ *Id.*

⁸⁸ See *Revisions to Forms, Statements, & Reporting Requirements for Nat. Gas Pipelines*, Order No. 710, 122 FERC ¶ 61,262, at P 23 (2008).

agreement in accordance with the Alternative Rate Policy Statement⁸⁹ and the Commission's negotiated rate policies.⁹⁰

2. Columbia's Virginia Reliability Project

49. Columbia estimates the cost of completing the Virginia Reliability Project is \$917,925,527. Columbia proposes to allocate \$607,126,271 of project costs associated with replacement of the existing VM-107 and VM-108 pipelines to its existing customers. It states that this cost would have been the same, even without the proposed expansion,⁹¹ and that a "like-for-like" equivalency cost allocation method was used to determine the estimated stand-alone costs for the replacement of the pipelines.⁹² Columbia proposes to recover the remaining \$310,799,255 of project costs, which includes \$186,820,429 of costs associated with replacing lines VM-107 and VM-108,⁹³ through a new incremental rate under Rate Schedule FTS-VRP for service using the incremental capacity created by the project.⁹⁴

⁸⁹ *Alts. to Traditional Cost-of-Service Ratemaking for Nat. Gas Pipelines; Regul. of Negotiated Transp. Servs. of Nat. Gas Pipelines*, 74 FERC ¶ 61,076, clarification granted, 74 FERC ¶ 61,194, order on reh'g and clarification, 75 FERC ¶ 61,024, reh'g denied, 75 FERC ¶ 61,066, reh'g dismissed, 75 FERC ¶ 61,291 (1996), petition denied sub nom. *Burlington Res. Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement).

⁹⁰ *Nat. Gas Pipelines Negotiated Rate Policies & Pracs.; Modification of Negotiated Rate Pol'y*, 104 FERC ¶ 61,134 (2003), order on reh'g and clarification, 114 FERC ¶ 61,042, reh'g dismissed and clarification denied, 114 FERC ¶ 61,304 (2006).

⁹¹ Columbia provides a breakout of the costs according to replacement needs and incremental service in Exhibit K. Columbia Application, Ex. K; Columbia April 13, 2023 Data Response Nos. 1-4, Att. 1.

⁹² Columbia Application at n.18 (citing *ANR Pipeline Co.*, 171 FERC ¶ 61,233, at P 19 (2021); *Dominion Transmission, Inc.*, at P 25 (2009)).

⁹³ Columbia Application, Ex. K; Columbia April 13, 2023 Data Response Nos. 1-4, Att. 1.

⁹⁴ Columbia Application at 15-16.

a. **Existing Shippers' Opposition to the Proposed Cost Allocation**

50. The Cities, Antero, Exelon, and EQT, all existing shippers on Columbia's system, question Columbia's assertion about the need and cost for proposed replacement of the existing VM-107 and VM-108 pipelines.⁹⁵ Exelon objects to Columbia's attempt to "arbitrarily assign those costs to the general system ratepayers despite the lack of any general system benefits."⁹⁶

51. Further, the Cities and Antero argue that Columbia does not provide documentation showing how it estimated the total cost of the pipeline replacement or describe in detail the "like-for-like" equivalency cost allocation method it applied.⁹⁷ The Cities asserts that Columbia inappropriately relies on Commission precedent in *Dominion Transmission, Inc.* and *ANR Pipeline Co.* in support for its method for allocating costs to system customers. The Cities states that, in contrast to these cases, Columbia has made no showing that it has been required by regulatory authorities to replace the 49 miles of pipeline or that the pipeline replacement is addressing any reliability issues and would have been undertaken without the proposed expansion.⁹⁸

52. Antero also questions the method for the project cost allocation, noting that Columbia has only stated that a "like-for-like" equivalency method was used in order to arrive at its high-level allocation of incremental and replacement costs in Exhibit K.⁹⁹ Antero asserts that the proposal thus provides inadequate information for the Commission to determine where costs are appropriately allocated between the replacement and incremental categories, particularly where, as here, the pipeline seeks to allocate over \$607 million of the project costs to existing system shippers.¹⁰⁰

⁹⁵ Cities Sept. 29, 2023 Motion to Intervene and Protest at 3-12; Antero Sept. 29, 2023 Comment at 2-3; Exelon Sept. 29, 2023 Protest at 3; EQT Feb. 27, 2023 Supplemental Comment at 2-3.

⁹⁶ Exelon Sept. 29, 2023 Protest at 2.

⁹⁷ Cities Sept. 29, 2023 Motion to Intervene and Protest at 6-12; Antero Sept. 29, 2023 Comment at 3.

⁹⁸ Cities Sept. 29, 2023 Motion to Intervene and Protest at 10-11.

⁹⁹ Antero Sept. 29, 2022 Comment at 3.

¹⁰⁰ *Id.*

53. EQT argues that Columbia fails to make a showing that it can financially support the project without relying on subsidization from its existing customers. EQT asserts that the proposed project contemplates a massive subsidy from Columbia's existing shippers in order to support the over \$607 million in improvements required to enable Columbia to provide a relatively modest level of incremental service.¹⁰¹

54. These parties argue that the Commission should reject Columbia's proposed allocation of costs between the replacement and the incremental facilities.

i. Columbia's Answer

55. Columbia argues that its methodology to allocate project costs between replacement facilities and incremental facilities, as supported in Exhibit K, is reasonable and consistent with Commission policy.¹⁰² Columbia points out that the Commission has granted predeterminations of rolled-in rate treatment for similar projects, as in *Paiute Pipeline Co.*, where the Commission held that assigning costs to maintain and improve existing service and enhance system reliability and flexibility for the benefit of all customers is not considered a subsidy.¹⁰³

ii. Supplemental Comments and Columbia's Second Answer and Response to Data Request

56. On February 27, 2023, Antero filed supplemental comments arguing that Columbia has failed to demonstrate that certain proposed replacement facilities are necessary for system reliability and has failed to justify its allocation of costs to existing shippers.¹⁰⁴

57. EQT argues that the Commission should reject Columbia's cost allocation and instead employ a cost allocation method whereby existing shippers would bear only project costs that relate to their utilization of the new replacement pipe. According to EQT's calculations, existing shippers will use approximately 26.6% of the new 24-inch pipeline, while 73.4% of the capacity is needed for the expansion service. It argues that, as a result, only 26.6% of the total cost of the project (or \$243 million) should be

¹⁰¹ EQT Sept. 29, 2022 Motion to Intervene and Comment at 5.

¹⁰² Columbia Oct. 14, 2022 Answer at 9-10 (citing *Dominion Transmission, Inc.* 129 FERC ¶ 61,048 (2009); *Paiute Pipeline Co.*, 104 FERC ¶ 61,078 (2003)).

¹⁰³ *Id.* at 7 (citing *Paiute*, 104 FERC ¶ 61,078 at P 40).

¹⁰⁴ Antero Feb. 27, 2023 Supplemental Comments at 5.

allocated to the existing shippers.¹⁰⁵ Furthermore, EQT asserts that Columbia has failed to meet the requirements of the Commission's regulations due to a lack of detailed estimates for capital costs as required in Exhibit K, including estimates of construction costs by operating units such as compressor stations and other facilities.¹⁰⁶

58. In its March 14, 2023 Answer, Columbia asserts that Antero's and EQT's comments provide no basis either to reconfigure the project or change the cost allocation. Columbia characterizes EQT's proposed alternative cost allocation as inconsistent with cost-causation principles and prior Commission precedent.

59. On April 13, 2023, Columbia filed additional information for its cost allocation, including a detailed Exhibit K, in response to a Commission's data request. Columbia reiterates that its methodology proposes to allocate the costs associated with the replacement of the VM-107 and VM-108 pipelines to the existing base-system and to allocate the balance of the costs of the project facilities to the expansion and that this is consistent with Commission precedent.¹⁰⁷ Columbia provided a workpaper that reflects the cost information contained in Exhibit K of its application along with additional detail including supporting calculations for estimating costs and allocations between replacement and incremental facilities.

iii. Commission Determination

60. We find that Columbia has demonstrated its proposed cost allocation to recover the costs of the replacement facilities is consistent with Commission policy because the replacement facilities are needed to provide safe and reliable transportation service to its existing customers.

61. The Commission's policy recognizes that existing customers should pay the costs of projects designed to improve their service by replacing existing capacity, improving reliability, or providing additional flexibility.¹⁰⁸ Since issuing the Certificate Policy Statement, the Commission has consistently found that existing shippers generally should

¹⁰⁵ EQT Feb. 27, 2023 Supplemental Comments at 4 & Affidavit of Steven W. Hinton at P 15.

¹⁰⁶ EQT Feb. 27, 2023 Supplemental Comments at 7.

¹⁰⁷ Columbia April 13, 2023 Data Response at 1.

¹⁰⁸ Certificate Policy Statement, 88 FERC ¶ 61,227 at n.12, *clarified*, 90 FERC at 61,393.

not pay for the costs of incremental expansions. However, that policy does not mean that the existing shippers should not be allocated the full costs associated with replacement facilities, even when the replacement projects are paired with incremental expansions.¹⁰⁹ As stated in *Paiute*, if we hold the expansion shipper responsible for contributing to the replacement costs simply because replacement and incremental projects are constructed concurrently, then the expansion shipper, in essence, would be subsidizing the construction of the replacement facilities.¹¹⁰

62. Columbia's allocation of the replacement and incremental expansion costs associated with the project is consistent with Commission policy and precedent. In both *Dominion* and *Paiute*, the Commission determined that an "in-kind" cost allocation method¹¹¹ was acceptable for the determination of the costs of proposed replacement facilities.¹¹² While the scale of the Virginia Reliability Project is greater than either of these cases, we find no justification for rejecting Columbia's application of the "in-kind" cost allocation methodology for Virginia Reliability Project. We find that existing shippers have not demonstrated that Columbia's cost allocation proposal is inconsistent with Commission precedent or inappropriate for the replacement proposed here. Additionally, we find that Columbia provided sufficient detail in Exhibit K and in its response to the staff's data request to support its proposed cost allocation.

b. Incremental Recourse Rates

63. Columbia estimates a first-year cost of service of \$46,066,363 associated with the incremental capacity.¹¹³ Columbia designed the initial incremental rate based on cost-of-service factors which include a system depreciation rate of 1.5%¹¹⁴ and a pretax return of

¹⁰⁹ *Paiute*, 104 FERC ¶ 61,078 at P 28.

¹¹⁰ *Id.* at P 30. *See also Dominion*, 129 FERC ¶ 61,048 at P 27.

¹¹¹ Under an in-kind cost allocation method, the estimated cost of recreating the existing capacity/function provided by a pipeline segment or compressor to be replaced is allocated to existing customers and the remainder of the project costs are allocated to the incremental expansion shippers. *See Paiute*, 104 FERC ¶ 61,078 at P 27.

¹¹² *Id.* at P 34; *Dominion*, 129 FERC ¶ 61,048 at P 27.

¹¹³ Columbia Application, Ex. N at 2.

¹¹⁴ *Columbia Gas Transmission, LLC*, 154 FERC ¶ 61,208, at P 8 (2016). The latest settlement approved in Docket Nos. RP20-1060-005 *et al.* did not modify the previously approved depreciation rates.

12.98%.¹¹⁵ Using these cost-of-service factors, Columbia calculated an initial incremental monthly reservation charge of \$38.199 per Dth based on estimated first-year incremental fixed costs of \$45,839,363 and billing determinants of 1,200,000 Dth.¹¹⁶ Columbia calculated an incremental usage charge of \$0.0124 per Dth based on its estimated first-year variable costs of \$227,000 and billing determinants of 18,250,000 Dth.¹¹⁷ Shippers under Rate Schedule FTS-VRP will also be required to pay all other applicable rates, charges, and surcharges with the exception of the Capital Cost Recovery Mechanism (CCRM) surcharge.¹¹⁸

64. We have reviewed Columbia's proposed initial incremental rate and find that it is consistent with current Commission policy. Columbia's proposed incremental monthly reservation charge of \$38.199 per Dth plus the proposed incremental usage charge of \$0.0124 per Dth is higher than Columbia's currently effective system maximum monthly recourse reservation charge of \$9.046 per Dth plus the system maximum recourse usage charge of \$0.0062 per Dth under Rate Schedule FTS.¹¹⁹ Therefore, we approve Columbia's initial incremental firm recourse reservation charge and usage charge under Rate Schedule FTS-VRP as the initial recourse charges for firm transportation service on the Virginia Reliability Project. In addition, Columbia is directed to charge the applicable system interruptible rate for the incremental capacity.

c. Replacement Facilities and Rolled-In Rate Treatment

65. Columbia asserts that the Commission should grant a predetermination that it may roll the replacement plant costs into its system rates in its next general NGA section 4 rate proceeding.¹²⁰ Columbia contends that replacing the subject portion of the VM-107 and VM-108 pipelines with upgraded, more modern, more reliable, and larger diameter

¹¹⁵ Columbia Application, Ex. P at 6.

¹¹⁶ *Id.* at 1.

¹¹⁷ *Id.* Columbia states that its usage billing determinants reflect a 50% load factor.

¹¹⁸ *Id.* at 16. Columbia states that its CCRM calculation does not include billing determinants for incrementally-priced projects. *Id.* at n.19.

¹¹⁹ Columbia Gas Transmission, LLC, Baseline Tariffs, Tariff Record-Currently Effective Rates (78.0.0).

¹²⁰ Columbia Oct. 14, 2022 Answer at 12.

pipeline will enable Columbia to provide continued safe and reliable natural gas transportation service to its existing customers.¹²¹

66. To support a request for a predetermination that a pipeline may roll the costs of a project into its system-wide rates in its next NGA section 4 rate proceeding, a pipeline must demonstrate that rolling in the costs associated with the construction and operation of new facilities will not result in existing customers subsidizing the expansion. The Certificate Policy Statement recognized the appropriateness of rolled-in rate treatment for facilities constructed to improve the reliability of service to existing customers or to improve service by replacing existing capacity, rather to increase levels of service.¹²² Here, Columbia has demonstrated that replacement of the proposed segments of the VM-107 and VM-108 pipelines will provide customers with safer and more reliable access to supplies for transportation to Market Area 34. Accordingly, we grant Columbia a predetermination that it may roll the replacement costs portion of the project into its system rates in a future NGA section 4 rate case, absent a significant change in circumstances.

d. Fuel

67. Columbia proposes to apply its generally-applicable system surcharges to recover the costs of fueling and powering the project's compressor units. These surcharges consist of the (1) Retainage Adjustment Mechanism (RAM) through which Columbia recovers lost and unaccounted for quantities and company-use gas and (2) the Electric Power Cost Adjustment (EPCA) through which Columbia recovers its electric power costs. Columbia states that the project will result in cost savings of \$1,236,504 for the RAM and \$382,773 for the EPCA.¹²³ Columbia calculates an illustrative RAM rate for the project of 1.822%,¹²⁴ which is lower than Columbia's currently effective transportation retainage rate of 1.831%.¹²⁵ In addition, Columbia's EPCA rate would

¹²¹ Columbia Application at 5.

¹²² Certificate Policy Statement, 88 FERC ¶ 61,227 at n.12.

¹²³ Columbia Application, Ex. Z-1 at 1.

¹²⁴ *Id.*, Ex. Z-1 at 2.

¹²⁵ Columbia Gas Transmission, LLC, FERC NGA Gas Tariff, Baseline Tariffs, Currently Effective Rates, Retainage Rates (15.0.0).

decrease from \$0.074 to \$0.073.¹²⁶ Therefore, we approve Columbia's proposal to use its currently effective transportation retainage rate for the project.

68. Additionally, the Transportation Cost Rate Adjustment (TCRA) and Operational Transaction Rate Adjustment (OTRA) surcharges will experience a cost savings of \$505,817 and \$174,393 respectively, due to the project.¹²⁷ Therefore, we approve Columbia's proposal to use its currently effective surcharges for the TCRA and OTRA for the project.

e. Reporting Incremental Costs

69. 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.¹²⁸ Therefore, we require Columbia to keep separate books and accounting of costs and revenues attributable to the incremental capacity created by the project. The books should be maintained with applicable cross-reference and the 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. 710.¹²⁹ We also require Columbia to keep separate books and accounting of costs and revenues internally for the replacement capacity relating to the VM-107 and VM-108 pipelines in the same manner.¹³⁰

¹²⁶ Columbia Application, Ex. Z-1 at 3.

¹²⁷ *Id.* at 1.

¹²⁸ 18 C.F.R. § 154.309.

¹²⁹ See Order No. 710, 122 FERC ¶ 61,262 at P 23. In *Gulf S. Pipeline Co., LLC*, 173 FERC ¶ 61,049 (2020), the Commission clarified that a pipeline charging its existing system rates for a project is not required to provide books and accounting consistent with Order No. 710. However, a pipeline is required to maintain its internal books and accounting such that it would have the ability to include this information in a future FERC Form No. 2 if the rate treatment for the project is changed in a future rate proceeding.

¹³⁰ *Id.*; see also *Gulf South*, 173 FERC ¶ 61,049 at P 6 (for projects that use existing system rates for the initial rates, the Commission's requirement for separate books and accounting applies only to internal books and records).

f. Negotiated Rates

70. Columbia proposes to provide service to the project shipper under a negotiated rate agreement. Columbia must file either the negotiated rate agreement or tariff records setting forth the essential terms of the agreement in accordance with the Alternative Rate Policy Statement and the Commission's negotiated rate policies.

E. Environmental Analysis

71. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),¹³¹ Commission staff evaluated the potential environmental impacts of the proposed CEC Project and Virginia Reliability Project in an Environmental Impact Statement (EIS). The U.S. Army Corps of Engineers (USACE), Norfolk District, and the U.S. Fish and Wildlife Service participated in development of the EIS as cooperating agencies, as defined by NEPA.¹³²

72. On December 20, 2021, Commission staff began its review of Transco's and Columbia's projects by granting their requests to use the Commission's pre-filing process¹³³ and established pre-filing Docket Nos. PF22-3-000 for the Virginia Reliability Project and PF22-4-000 for the CEC Project. The Commission's pre-filing process is designed to encourage early involvement by citizens, governmental entities, non-governmental organizations, and other interested parties in the development of proposed natural gas transmission projects, prior to the filing of a formal application.

73. As part of the pre-filing process, on February 22, 2022, the Commission issued a Notice of Scoping Period Requesting Comments on Environmental Issues for the Planned

¹³¹ 42 U.S.C. §§ 4321 *et seq.* See also 18 C.F.R. pt. 380 (Commission's regulations implementing NEPA). On July 16, 2020, the Council on Environmental Quality (CEQ) issued a final rule updating its 1978 regulations, Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304 (July 16, 2020), which was effective September 14, 2020. On April 20, 2022, CEQ issued a final rule to amend three provisions of its NEPA regulations which became effective on May 20, 2022. National Environmental Policy Act Implementing Regulations Revisions, 87 Fed. Reg. 23,453 (Apr. 20, 2022). The April 2022 final rule generally restores provisions of the 1978 regulations that were modified in 2020.

¹³² 40 C.F.R. § 1501.8 (2022). Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by a proposal and participate in the NEPA analysis.

¹³³ See 18 C.F.R. § 157.21(b).

Virginia Reliability Project and CEC Project, and Notice of Public Scoping Session. The notice was published in the *Federal Register* on February 22, 2022, and opened a 30-day scoping period.¹³⁴ By supplemental notice on March 7, 2022, the Commission extended the scoping period to April 6, 2022.¹³⁵ The notices were mailed to federal, state, and local officials; agency representatives; conservation organizations; Native American Tribes; local libraries and newspapers; non-governmental organizations; and property owners in the vicinity of the planned projects (Commission staff's environmental mailing list).

74. Commission staff held virtual scoping meetings for both projects to provide an opportunity for agencies and the general public to comment about issues to be addressed during the environmental analysis. The virtual sessions were held via phone on March 15 and 30, 2022, and 11 individuals provided oral comments on the projects. As part of the pre-filing review, Commission staff also participated in Transco's virtual open house meeting for the CEC Project in December 2021, and three open house public meetings sponsored by Columbia for the Virginia Reliability Project between April 5 and 7, 2022, to explain our environmental review process to interested stakeholders. The pre-filing process for both projects ended on August 24, 2022, when Columbia and Transco filed applications for their respective projects.

75. On October 25, 2022, the Commission issued a Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Virginia Reliability Project and Commonwealth Energy Connector Project, Request for Comments on Environmental Issues, and Schedule for Environmental Review (NOI). The NOI requested public comments on the scope of issues to be addressed in the environmental document. The notice was published in the *Federal Register*¹³⁶ and was mailed to stakeholders for both projects on the Commission staff's environmental mailing list.

76. In response to the NOI, the Commission received comments from over 200 individuals, businesses, organizations, agencies, Tribes, and elected officials. Comments expressed concerns regarding project purpose and need, historic and cultural resources, surface water quality, wildlife habitats, aquatic resources, the Great Dismal Swamp, greenhouse gas (GHG) emissions and climate change, air quality, reliability and safety, planned development, and environmental justice communities.

77. Pursuant to NEPA requirements, Commission staff prepared a draft EIS, which was issued on April 11, 2023, and, in which all substantive environmental comments

¹³⁴ 87 Fed. Reg. 11,062 (Feb. 22, 2022).

¹³⁵ 87 Fed. Reg. 13,996 (Mar. 7, 2022)

¹³⁶ 87 Fed. Reg. 65,759 (Nov. 1, 2022).

received prior to issuance were addressed. Notice of the draft EIS was published in the *Federal Register* on April 18, 2023,¹³⁷ establishing a comment period that ended on June 5, 2023. The notice was also mailed to project stakeholders on the Commission staff's environmental mailing list, including individuals who provided scoping comments or asked to be on the mailing list.

78. In response to the draft EIS, the Commission received written comments from the U.S Environmental Protection Agency (EPA), two members of the U.S. Congress, the Nansemond Indian Nation, Virginia Department of Environmental Quality (Virginia DEQ), the Virginia Department of Conservation and Recreation, Virginia Department of Health, the Virginia Department of Transportation, ten members of the Commonwealth of Virginia House of Delegates, eight organizations, about 151 individuals (130 of whom submitted identical letters), and Columbia. Commission staff held one virtual public comment session on May 3, 2023, and three in-person public comment sessions in the project areas between, April 25 and April 27, 2023, in Petersburg, Chesapeake, and Emporia, Virginia, respectively, to solicit and receive comments on the draft EIS. Four individuals provided comments during the virtual public comment session. During the in-person comment sessions, 26 individuals and two persons speaking on behalf of organizations provided comments. Comments expressed the same general concerns as described above for the scoping comments. Many comments focused on the impacts of Columbia's proposed Petersburg Compressor Station on environmental justice communities.

79. Commission staff issued the final EIS on September 15, 2023. The Notice of Availability was published in the *Federal Register* on September 21, 2023,¹³⁸ and the notice was mailed to the Commission staff's environmental mailing list. The final EIS addresses all substantive environmental comments received on the draft EIS. It addresses geology; soils; groundwater; surface water; wetlands; aquatic resources; vegetation and wildlife; threatened, endangered, and other special-status species; land use and visual resources; cultural resources; socioeconomics; environmental justice;¹³⁹ air quality and

¹³⁷ 88 Fed. Reg. 23,667 (Apr. 18, 2023).

¹³⁸ 88 Fed. Reg. 65,161 (Sept. 21, 2023).

¹³⁹ Under NEPA, the Commission considers impacts to all potentially affected communities. Consistent with Executive Order 12,898 and Executive Order 14,008, the Commission separately identifies and addresses "disproportionately high and adverse human health or environmental effects" on environmental justice communities. Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994); Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021). *See infra* PP 102-143.

noise; GHGs and climate change; reliability and safety; cumulative impacts; and alternatives.

80. The final EIS concludes that approval of the proposed projects, with the staff's recommended mitigation measures, would result in some adverse environmental impacts; however, with the exception of potential impacts on climate change, the final EIS concluded that impacts would be reduced to less than significant levels with implementation of Columbia's and Transco's proposed avoidance, minimization, and mitigation measures and the Commission staff's project-specific recommendations.¹⁴⁰ With regard to climate change impacts, the final EIS does not characterize the projects' GHG emissions as significant or insignificant, but we provide information about these emissions below, based on the information on file in the proceeding and as disclosed in the final EIS.¹⁴¹

81. In response to the final EIS, the Commission received comments from the Nansemond Indian Nation regarding the Nansemond community's history and cultural heritage. These comments are addressed below. In addition, the Commission received a comment from EPA. The portions of EPA's comment not previously addressed in the final EIS are addressed below. Last, we also received one comment from an individual supporting the Virginia Reliability Project.

82. After Commission staff issued the draft EIS, Congress enacted the *Fiscal Responsibility Act of 2023*.¹⁴² A section titled "Builder Act" amended NEPA in several ways.¹⁴³ NEPA section 102(C), as amended, requires that agencies prepare NEPA documents on:

(i) reasonably foreseeable environmental effects of the proposed agency action;

(ii) any reasonably foreseeable adverse environmental effects which

¹⁴⁰ Final EIS at ES-15.

¹⁴¹ See *infra* PP 91-101.

¹⁴² See FISCAL RESPONSIBILITY ACT OF 2023, PL 118-5, 137 Stat 10 (June 3, 2023). The Commission relied on the *Fiscal Responsibility Act of 2023* in a recent order. See *Mountain Valley Pipeline, LLC*, 183 FERC ¶ 61,221, at PP 7, 9, 11 n.20 (2023).

¹⁴³ See FISCAL RESPONSIBILITY ACT OF 2023, PL 118-5, 137 Stat 10, at § 321 (June 3, 2023) (providing the "Builder Act").

cannot be avoided should the proposal be implemented;

(iii) a reasonable range of alternatives to the proposed agency action, including an analysis of any negative environmental impacts of not implementing the proposed agency action in the case of a no action alternative, that are technically and economically feasible, and meet the purpose and need of the proposal;

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and

(v) any irreversible and irretrievable commitments of Federal resources which would be involved in the proposed agency action should it be implemented.¹⁴⁴

83. The Commission has complied with its responsibilities under the current version of NEPA.¹⁴⁵

1. Cultural Resources

84. On September 15, 2023, the Nansemond Indian Nation filed documents containing information on the Nansemond community's history and cultural heritage. On October 2, 2023, the Nansemond Indian Nation made a filing explaining that it had reached an agreement with Columbia to resolve the Nansemond Indian Nation's concerns regarding an ethnographic and traditional cultural property study.¹⁴⁶ The Nansemond Indian Nation further stated that it considered section 106 consultation between the Commission and the Nansemond Indian Nation resolved.¹⁴⁷ The final EIS acknowledges that comments by the Virginia State Historic Preservation Office on some of Columbia's reports and plans are pending and includes a recommendation (Environmental Condition 15 in Appendix C of the order) that Columbia not begin construction until National Historic Preservation

¹⁴⁴ 42 U.S.C. § 4332(c)(i).

¹⁴⁵ We note that the CEQ recently published a Notice of Proposed Rulemaking to revise its regulations implementing NEPA, including to implement the Builder Act amendments. 88 Fed. Reg. 49,924 (July 31, 2023). The Commission will monitor this proceeding to inform the Commission's practices going forward.

¹⁴⁶ Nansemond Indian Nation Oct. 2, 2023 Comment 1-2.

¹⁴⁷ *Id.* at 1.

Act Section 106 consultation has been completed for the Virginia Reliability Project.¹⁴⁸ We agree.

2. Water Resources and Wetlands

85. EPA provided comments on the final EIS regarding water resources and wetlands for the Virginia Reliability Project and the CEC Project, stating that the USACE Norfolk District's Wetland Attribute Form should be completed to provide a qualitative description of the wetlands affected by each project.¹⁴⁹ Transco and Columbia included in their applications wetland delineations of the project areas in accordance with the 1987 USACE Wetlands Delineation Manual, as well as the regional USACE supplements for the Eastern Mountains and Piedmont Region and Atlantic and Gulf Coastal Plain Region.¹⁵⁰ This information contains descriptions of each of the wetlands impacted by the projects. In August 2022 and January 2023, Transco and Columbia, respectively, submitted a Standard Joint Permit Application with the USACE, the Virginia DEQ, and Virginia Marine Resources Commission for authorization for project construction under Section 404 of the Clean Water Act and the Virginia Water Protection Program.¹⁵¹ The Norfolk District developed the Wetland Attribute Form¹⁵² to assist their Section 404 permitting process by standardizing the presentation of commonly required information.¹⁵³ The recommended Wetland Attribute Form, however, is not intended to replace the assessment of functional/values of a wetland.¹⁵⁴ The USACE, as a

¹⁴⁸ Final EIS at 4-100.

¹⁴⁹ EPA Oct. 19, 2023 Comment, Enclosure at 3-5.

¹⁵⁰ See Transco Application at 2-26 and Columbia Application at 2-18.

¹⁵¹ Final EIS at 1-9 to 1-10. See also Transco Application, Resource Report 2, Att. 2D (attaching Transco's Joint Permit Application) and Virginia Marine Resources Commission, webapps.mrc.virginia.gov/public/habitat/additionaldocs.php?id=20230100 (Columbia's Joint Permit Application).

¹⁵² USACE, Norfolk District Wetland Attribute Form, <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll7/id/14234> (issued May 8, 2020).

¹⁵³ USACE, *Public Notice of the Norfolk District Wetland Attribute Form*, <https://www.nao.usace.army.mil/Media/Public-Notices/Article/2178273/norfolk-district-wetland-attribute-form/> (issued May 8, 2020).

¹⁵⁴ USACE, Wetland Attribute Form: Procedures Manual (version 1.0) (March 2020), <https://usace.contentdm.oclc.org/utills/getfile/collection/p16021coll7/id/14233>.

cooperating agency, has not required that either Transco or Columbia submit a Wetland Attribute Form. If the USACE decides later that the form is needed, it can request it during the Section 404 permitting process.

86. EPA recommended that the final EIS clearly define the total permanent and temporary stream and wetland impacts that will result from construction and operation of the projects.¹⁵⁵ The total temporary and permanent surface waterbody impacts related to the Virginia Reliability and CEC Projects are set forth in tables D-9 and 4.3-5, respectively, of the final EIS.¹⁵⁶ The total temporary and permanent wetland impacts are listed in table 4.3-10 for the Virginia Reliability Project¹⁵⁷ and in table 4.3-11 for the CEC Project.¹⁵⁸ The final EIS also provides a qualitative description of the wetlands potentially impacted by both projects.¹⁵⁹

87. EPA recommended that Transco provide a restoration plan for waterbody and stream impacts, that markers of success be consistent with the Virginia Interagency Review Team practice and the 2018 Mitigation Banking Instrument Template, and that the sites be monitored post-construction for a minimum of five years. As noted in the final EIS, Transco has developed a restoration plan and will monitor and implement appropriate mitigative measures up to five years after construction. Transco has submitted this restoration plan to the Virginia DEQ and the USACE for review and approval.¹⁶⁰ EPA's concerns will be addressed through that process.

88. EPA recommended that Transco evaluate using a less-impacting method of crossing waterbodies and wetlands, such as horizontal directional drilling, in sensitive locations.¹⁶¹ As stated in the final EIS, the CEC Project will not cross any sensitive surface waterbodies¹⁶² and construction related to the Commonwealth Loop would only

¹⁵⁵ EPA Oct. 19, 2023 Comment, Enclosure at 3.

¹⁵⁶ Final EIS at 4-26, app. D at D-18 to D-25.

¹⁵⁷ *Id.* at 4-37.

¹⁵⁸ *Id.* at 4-39.

¹⁵⁹ *Id.* at 4-35 to 4-36.

¹⁶⁰ *Id.* at 4-40.

¹⁶¹ EPA Oct. 19, 2023 Comment, Enclosure at 3.

¹⁶² Final EIS at 4-28 to 4-29.

impact 2.52 acres of wetlands.¹⁶³ Because the crossings will occur in maintained rights-of way and impact previously disturbed areas and as the waterbody crossings would be 15 feet or less in length, we conclude that dry-ditch crossing methods, rather than HDD, are appropriate for these crossings. In addition, we note that USACE and Virginia DEQ have not recommended that Transco should implement an HDD or an alternative waterbody crossing method.

89. EPA also commented that the Virginia Reliability Project would involve temporary discharges of fill material to wetlands and waterbodies. As stated in the final EIS, Columbia will use dry-ditch methods to cross all waterbodies if flow is present or use conventional upland methods if flow is not present.¹⁶⁴ Columbia will also use trenchless crossing methods, such as HDD, to avoid in-stream construction.¹⁶⁵ Because using any waterbody crossing method could result in temporary discharges of fill material to wetlands and waterbodies, as noted above, Columbia will obtain a section 404 permit from the USACE before crossing a wetland or waterbody. To avoid or minimize impacts, Columbia will adhere to requirements contained in applicable federal, state, and local permits for construction activities associated with waterbodies, and will follow its Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management for Virginia Projects (Annual Standards)¹⁶⁶ and associated plans, which incorporate the measures included in the Commission's Wetland and Waterbody Construction and Mitigation Procedures (Procedures).¹⁶⁷ In addition, Columbia will conduct construction activities in wetlands in accordance with the techniques specified in its Annual Standards, including minimizing the construction right-of-way width in wetlands to 75 feet.

90. EPA also requested that Columbia develop a restoration plan for temporary fills of wetlands and waterbodies as part of the section 404 permitting process. Columbia has committed to restore wetland areas by complying with its Annual Standards, which incorporates the Commission's Procedures. Columbia's restoration measures include backfilling excavated areas to pre-construction contours, reestablishing herbaceous and/or woody species, controlling the invasion and spread of undesirable exotic species,

¹⁶³ *Id.* at 4-39.

¹⁶⁴ *Id.* at 4-24.

¹⁶⁵ *Id.*

¹⁶⁶ Columbia Application, app. 1-F.

¹⁶⁷ Final EIS at 4-32. The Commission's Procedures are available <https://www.ferc.gov/sites/default/files/2020-04/wetland-waterbody-construction-mitigation-procedures.pdf> (dated May 2013).

and monitoring the success of the revegetation and weed control efforts.¹⁶⁸ During construction, Columbia will segregate topsoil, to the extent practicable, to preserve the seed bank. In non-inundated areas, Columbia will apply an approved seed mix consisting of annual rye grass to serve as a temporary vegetative measure until indigenous plants reestablish cover.¹⁶⁹ In addition, as part of its ongoing wetland permitting process with the Virginia DEQ and USACE, Columbia is developing a Restoration and Monitoring Plan that outlines project-specific wetland restoration measures. EPA's concerns about the adequacy and content of Columbia's Restoration and Monitoring Plan will be addressed through the Section 404 permitting process.

3. Greenhouse Gas Emissions and Climate Change

91. CEQ defines effects or impacts as “changes to the human environment from the proposed action or alternatives that are reasonably foreseeable,” which include those effects that “occur at the same time and place” and those that “are later in time or farther removed in distance, but are still reasonably foreseeable.”¹⁷⁰ An impact is reasonably foreseeable if it is “sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision.”¹⁷¹

92. For the CEC Project and Virginia Reliability Project, we find that each project's construction emissions and operational emissions, as well as the downstream combustion emissions associated with the transportation capacity subscribed by Virginia Gas, are reasonably foreseeable emissions.

93. The final EIS estimates that construction of the CEC Project would result in 20,935 tons of carbon dioxide equivalent (CO_{2e}) emissions (equivalent to 18,991 metric tons of CO_{2e}) and the construction of the Virginia Reliability Project would result in

¹⁶⁸ Columbia July 7, 2023 Data Response, Att. 2.

¹⁶⁹ *Id.*

¹⁷⁰ 40 C.F.R. § 1508.1(g).

¹⁷¹ *Id.* § 1508.1(aa). See generally *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004) (explaining that “NEPA requires ‘a reasonably close causal relationship’ between the environmental effect and the alleged cause” and that “[t]he Court analogized this requirement to the ‘familiar doctrine of proximate cause from tort law’”) (citation omitted); *Food & Water Watch v. FERC*, 28 F.4th 277, 288 (D.C. Cir. 2022) (“Foreseeability depends on information about the ‘destination and end use of the gas in question.’”) (citation omitted); *Sierra Club v. FERC*, 867 F.3d 1357, 1371 (D.C. Cir. 2017) (*Sabal Trail*) (“FERC should have estimated the amount of power-plant carbon emissions that the pipelines will make possible.”).

38,579 tons of CO_{2e} emissions (equivalent to 34,998 metric tons of CO_{2e}).¹⁷² The final EIS estimates that direct GHG emissions from operation of the CEC Project would result in 1,656 tons per year (tpy) of CO_{2e} emissions (equivalent to 1,502 metric tpy of CO_{2e}).¹⁷³ Direct GHG emissions from operation of the Virginia Reliability Project would result in an increase in CO_{2e} emissions by 20,131 tpy, which is equivalent to 18,259 metric tpy of CO_{2e}. Estimates for each project's operational emissions are based on the potential to emit (100% utilization), where the facilities are operated at maximum capacity for 365 days per year, 24 hours per day.¹⁷⁴

94. As previously described, the two projects are designed to together provide 100,000 Dth per day of incremental transportation capacity across both Transco's and Columbia's systems for delivery for ultimate use by Virginia Gas' residential, commercial, and industrial customers in southeast Virginia.¹⁷⁵ In addition, Virginia Gas subscribed for an additional 2,300 Dth per day on the CEC Project to secure firm upstream transportation for same amount of capacity it already holds on Columbia's system and another 2,700 Dth per day to transport gas to be used for pipeline fuel retainage on Columbia's system downstream of the Emporia M&R Station interconnect with Transco's system. Accordingly, the downstream emissions related to Virginia Gas precedent agreements with both Transco and Columbia are 105,000 Dth per day,¹⁷⁶ which assumes that total

¹⁷² Final EIS at 4-208.

¹⁷³ *Id.* at 4-160.

¹⁷⁴ *Id.*

¹⁷⁵ As described in section II (Proposals) of this order, the 100,000 Dth per day of incremental capacity will allow Virginia Gas to retire its aging on-system propane-air peak shaving facilities by substituting 70,000 Dth per day of capacity on Transco's system and the remaining 30,000 Dth per day is for incremental gas demand. We note that Virginia Gas' substitution of capacity on Transco's system provided by the projects for propane could result in an offset of downstream GHG emissions. Because the record does not provide sufficient information to assist in the GHG calculation, the final EIS does not account for the possible offset.

¹⁷⁶ *See* Final EIS at n.80.

amount of natural gas would be combusted.¹⁷⁷ Combustion of 105,000 Dth per day may result in up to 2.03 million metric tons of CO_{2e} emissions per year.¹⁷⁸

95. In the final EIS the social cost of GHGs was presented individually for each project, which, if added together would result in double-counting of the downstream emissions associated with the projects. Here, to prevent potential confusion, we provide a single social cost of GHG estimate for both projects, which combines the construction and operation GHG emissions of both projects with the downstream consumption of 105,000 Dth per day for 20 years. Assuming a full burn, the social cost of GHG is equal to \$517,010,127 (assuming a discount rate of 5%), \$1,954,083,805 (assuming a discount rate of 3%), \$2,952,435,927 (assuming a discount rate of 2.5%) or \$5,942,046,899 (using the 95th percentile of the social cost of GHGs with a discount rate of 3%).¹⁷⁹ The final EIS states that “[c]onstruction and operation of the [project] facilities would increase the atmospheric concentration of GHGs in combination with past, current, and future emissions from all other sources globally and contribute incrementally to future climate change impacts.”¹⁸⁰ We clarify that, assuming that the transported gas is not displacing equal- or higher-emitting sources, we recognize that the projects’ contributions to GHG emissions globally contribute to future climate change impacts,¹⁸¹ including impacts in the region.¹⁸²

96. In its comments on the final EIS, the EPA recommends that the Commission estimate a range of upstream emissions associated with natural gas production as

¹⁷⁷ *Id.* at 4-208. Full burn calculations are, in most cases, an overestimate because pipelines only operate at full capacity during limited periods of full demand.

¹⁷⁸ *Id.*

¹⁷⁹ *See id.* at 4-211 to 4-212; *see id.* for a description of the method and assumptions staff uses for calculating the social cost of GHGs. The IWG draft guidance identifies costs in 2020 dollars. Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990*, at 5 (Table ES-1) (Feb. 2021).

¹⁸⁰ Final EIS at 4-209.

¹⁸¹ *See id.*

¹⁸² *Id.* at 4-205 to 4-207 (discussing observations from the Fourth Assessment Report).

reasonably foreseeable indirect effects of the proposed projects.¹⁸³ Upstream GHG emissions attributable to the projects are not reasonably foreseeable. The environmental effects resulting from natural gas production are generally neither caused by a proposed pipeline project nor are they reasonably foreseeable consequences of our approval of an infrastructure project, as contemplated by CEQ's regulations.¹⁸⁴ Here, whether there will be any incremental development of production wells associated with the capacity subscribed by Virginia Gas is unknown. That natural gas production and transportation facilities are all components of the general supply chain required to bring domestic natural gas to market does not mean that the Commission's approval of a particular infrastructure project will cause additional gas production.¹⁸⁵ Even knowing the identity of a producer of gas to be shipped on a pipeline and the general location of that producer's existing wells would not necessarily reveal whether additional wells would be induced.¹⁸⁶ Therefore, based on the lack of information showing that the projects would induce additional production, we conclude that upstream GHG emissions are not reasonably foreseeable.

97. As we have done in prior certificate orders, the final EIS compares estimated project GHG emissions to the total GHG emissions of the United States as a whole and at the state level. This comparison allows us to place project emissions in context. At a national level, 5,586 million metric tons of CO_{2e} were emitted in 2021 (inclusive of CO_{2e} sources and sinks).¹⁸⁷ Construction emissions from the CEC Project could potentially increase CO_{2e} emissions based on the national 2021 levels by 0.0003%.¹⁸⁸ Construction emissions from the Virginia Reliability Project could potentially increase CO_{2e} emissions

¹⁸³ EPA Oct. 19, 2023 Comment on the Final EIS at 5.

¹⁸⁴ *E.g.*, *Equitrans, L.P.*, 183 FERC ¶ 61,200, at P 42 (2023); *see, e.g.*, *Transcon. Gas Pipe Line Co., LLC*, 182 FERC ¶ 61,148, at P 93 (2023); *Cent. N.Y. Oil & Gas Co., LLC*, 137 FERC ¶ 61,121, at PP 81-101 (2011), *order on reh'g*, 138 FERC ¶ 61,104, at PP 33-49 (2012), *petition for review dismissed sub nom. Coal. for Responsible Growth v. FERC*, 485 F. App'x. 472, 474-75 (2d Cir. 2012) (unpublished opinion); *see also Nat'l Fuel Gas Supply Corp.*, 164 FERC ¶ 61,084, at P 102 (2018).

¹⁸⁵ *Nat'l Fuel Gas Supply Corp.*, 158 FERC ¶ 61,145, at P 157 (2017), *order on reh'g*, 164 FERC ¶ 61,084 (2018).

¹⁸⁶ *Id.* P 163.

¹⁸⁷ EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021 at ES-5 (Table ES-2) (April 2023), <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2021>.

¹⁸⁸ *See* Final EIS at 4-209.

based on the national 2021 levels by 0.0006% per year. In subsequent years, the CEC Project's and Virginia Reliability Project's combined estimated operational emissions (19,761 metric tons of CO_{2e}) and downstream emissions (2.03 million metric tons of CO_{2e}), based on the combustion of the subscribed 105,000 Dth per day of natural gas throughput, could potentially increase emissions by 0.0367% per year based on the national 2021 levels.

98. At the state level, 98.0 million metric tons of energy-related CO₂ were emitted in 2021 in the state of Virginia.¹⁸⁹ Construction emissions from the CEC Project and the Virginia Reliability Project could potentially increase CO₂ emissions based on the state's 2021 levels by 0.04% and 0.02% per year, respectively.¹⁹⁰ In subsequent years, the CEC Project's and Virginia Reliability Project's operations and reasonably foreseeable downstream emissions could potentially increase emissions by 2.09% per year.

99. When states have GHG emissions reduction targets, we will compare the project's GHG emissions to those state goals to provide additional context.¹⁹¹ Virginia established a statutory target for net-zero GHG emissions by 2045.¹⁹² The operational increases in GHGs for the projects and the increase in the volume of natural gas consumed by end users would result in a net increase of GHG emissions¹⁹³ assuming that the transported gas is not displacing equal- or higher-emitting sources.

100. We clarify that for informational purposes, Commission staff disclosed an estimate of the social cost of GHGs.¹⁹⁴ While we have recognized in some past orders

¹⁸⁹ U.S. Energy Information Administration, Table 1, State Energy-Related Carbon Dioxide Emissions by Year, Unadjusted: Virginia (July 12, 2023), <https://www.eia.gov/environment/emissions/state/>.

¹⁹⁰ Final EIS at 4-210.

¹⁹¹ Final EIS at 4-210.

¹⁹² Va. Code § 45.2-1706.1(A)(4) (2023); Final EIS at 4-210.

¹⁹³ Final EIS at 4-210.

¹⁹⁴ *Id.* at 4-210 through 4-212. We note that “Commission staff have not identified a methodology to attribute discrete, quantifiable, physical effects on the environment resulting from the Project's incremental contribution to GHGs.” *Id.* at 4-209. To the extent the final EIS contains any language indicating otherwise, such language is superseded and controlled by this order.

that social cost of GHGs may have utility in certain contexts such as rulemakings,¹⁹⁵ we have also found that calculating the social cost of GHGs does not enable the Commission to determine credibly whether the reasonably foreseeable GHG emissions associated with a project are significant or not significant in terms of their impact on global climate change.¹⁹⁶ Currently, however, there are no criteria to identify what monetized values are significant for NEPA purposes.¹⁹⁷ Nor are we aware of any other currently scientifically accepted method that would enable the Commission to determine the significance of reasonably foreseeable GHG emissions.¹⁹⁸ The D.C. Circuit has repeatedly upheld the Commission's decisions not to use the social cost of carbon, including to assess significance.¹⁹⁹ In fact, the D.C. Circuit recently affirmed the Commission's decision to

¹⁹⁵ *Fla. Se. Connection, LLC*, 164 FERC ¶ 61,099, at PP 35-37 (2018).

¹⁹⁶ *See Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043, at P 296 (2017), *aff'd sub nom. Appalachian Voices v. FERC*, No. 15-1271, 2019 WL 847199 (D.C. Cir. 2019); *Del. Riverkeeper Network v. FERC*, 45 F.4th 104, 111 (D.C. Cir. 2022). The social cost of GHGs tool merely converts GHG emissions estimates into a range of dollar-denominated figures; it does not, in itself, provide a mechanism or standard for judging “significance.”

¹⁹⁷ *Tenn. Gas Pipeline Co., L.L.C.*, 181 FERC ¶ 61,051 at P 37; *see also Mountain Valley Pipeline, LLC*, 161 FERC ¶ 61,043 at P 296, *order on reh'g*, 163 FERC ¶ 61,197, at PP 275-297 (2018), *aff'd, Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199, at * 2 (“[The Commission] gave several reasons why it believed petitioners’ preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.”); *EarthReports v. FERC*, 828 F.3d 949, 956 (D.C. Cir. 2016) (accepting the Commission’s explanation why the social cost of carbon tool would not be appropriate or informative for project-specific review, including because “there are no established criteria identifying the monetized values that are to be considered significant for NEPA purposes”); *Tenn. Gas Pipeline Co., L.L.C.*, 180 FERC ¶ 61,205, at P 75 (2022); *See, e.g., LA Storage, LLC*, 182 FERC ¶ 61,026, at P 14 (2023); *Columbia Gulf Transmission, LLC*, 180 FERC ¶ 61,206, at P 91 (2022).

¹⁹⁸ *See, e.g., LA Storage, LLC*, 182 FERC ¶ 61,026 at P 14 (“there are currently no criteria to identify what monetized values are significant for NEPA purposes, and we are currently unable to identify any such appropriate criteria”).

¹⁹⁹ *See, e.g., Ctr. for Biological Diversity v. FERC*, 67 F.4th 1176, 1184 (D.C. Cir. 2023) (*Alaska LNG*) (explaining that “the Commission compared the Project’s direct emissions with existing Alaskan and nationwide emissions,” “declined to apply the social cost of carbon for the same reasons it had given in a previous order”; describing those reasons as: (1) “the lack of consensus about how to apply the social cost of carbon on a

not analyze the social cost of carbon in its NEPA analysis,²⁰⁰ rejected the suggestion that it was required to do so, found that the petitioner’s arguments “fare no better when framed as NGA challenges,” and then, in the very same paragraph, sustained the Commission’s public interest determination as “reasonable and lawful.”²⁰¹

101. We note that there currently are no accepted tools or methods for the Commission to use to determine significance; therefore, the Commission is not herein characterizing these emissions as significant or insignificant.²⁰² Accordingly, we have taken the required “hard look” and have satisfied our obligations under NEPA.

4. Environmental Justice

102. In conducting NEPA reviews of proposed natural gas projects, the Commission follows Executive Order 12898 and Executive Order 14096, which direct federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority and low-income populations (i.e.,

long time horizon,” (2) that “the social cost of carbon places a dollar value on carbon emissions but does not measure environmental impacts as such,” and (3) “FERC has no established criteria for translating these dollar values into an assessment of environmental impacts”; and recognizing that the Commission’s “approach was reasonable and mirrors analysis . . . previously upheld” and that the Commission “had no obligation in this case to consider the social cost of carbon”) (citations omitted); *EarthReports*, 828 F.3d at 956 (upholding the Commission’s decision not to use the social cost of carbon tool due to a lack of standardized criteria or methodologies, among other things)); *Del. Riverkeeper Network v. FERC*, 45 F.4th 104 (also upholding the Commission’s decision not to use the social cost of carbon); *Appalachian Voices v. FERC*, No. 17-1271, 2019 WL 847199 (same).

²⁰⁰ *Alaska LNG*, 67 F.4th at 1184 (“Rather than use the social cost of carbon, the Commission compared the Project’s direct emissions with existing Alaskan and nationwide emissions. It declined to apply the social cost of carbon for the same reasons it had given in a previous order. . . FERC’s approach was reasonable and mirrors analysis we have previously upheld.”).

²⁰¹ *Id.*

²⁰² The February 18, 2022 Interim GHG Policy Statement, *Consideration of Greenhouse Gas Emissions in Nat. Gas Infrastructure Project Revs.*, 178 FERC ¶ 61,108 (2022), which proposed to establish a NEPA significance threshold of 100,000 tons per year of CO_{2e} as a matter of policy, has been converted to draft status, and opened to further public comment. Order on Draft Policy Statements, 178 FERC ¶ 61,197 at P 2.

environmental justice communities).²⁰³ Executive Order 14008 also directs agencies to develop “programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts.”²⁰⁴ Environmental justice is “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”²⁰⁵

²⁰³ Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 11, 1994); Exec. Order No. 14,096, 88 Fed. Reg. 25251 (Apr. 21, 2023). While the Commission is not one of the specified agencies in Executive Order 12898 or Executive Order 14096, the Commission nonetheless addresses environmental justice in its analysis, in accordance with our governing regulations and guidance. See 18 C.F.R. § 380.12(g) (2022) (requiring applicants for projects involving significant aboveground facilities to submit information about the socioeconomic impact area of a project for the Commission’s consideration during NEPA review); FERC, *Guidance Manual for Environmental Report Preparation* at 4-76 to 4-80 (Feb. 2017), <https://www.ferc.gov/sites/default/files/2020-04/guidance-manual-volume-1.pdf>.

²⁰⁴ Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021). The term “environmental justice community” includes disadvantaged communities that have been historically marginalized and overburdened by pollution. *Id.* at 7629. The term also includes, but may not be limited to minority populations, low-income populations, or indigenous peoples. See EPA, EJ 2020 Glossary (Aug. 18, 2022), <https://www.epa.gov/environmentaljustice/ej-2020-glossary>.

²⁰⁵ EPA, *Learn About Environmental Justice*, (last updated Aug. 16, 2023) <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. *Id.* Meaningful involvement of potentially affected environmental justice community residents means: (1) people have an appropriate opportunity to participate in decisions about a proposed activity that may affect their environment and/or health; (2) the public’s contributions can influence the regulatory agency’s decision; (3) community concerns will be considered in the decision-making process; and (4) decision makers will seek out and facilitate the involvement of those potentially affected. *Id.*

103. Consistent with CEQ²⁰⁶ and EPA²⁰⁷ guidance and recommendations, the Commission's methodology for assessing environmental justice impacts considers: (1) whether environmental justice communities (e.g., minority or low-income populations)²⁰⁸ exist in the project area; (2) whether impacts on environmental justice communities are disproportionately high and adverse; and (3) possible mitigation measures. As recommended in *Promising Practices*, the Commission uses the 50% and the meaningfully greater analysis methods to identify minority populations.²⁰⁹ Specifically, a minority population is present where either: (1) the aggregate minority population of the block groups in the affected area exceeds 50%; or (2) the aggregate

²⁰⁶ CEQ, *Environmental Justice: Guidance Under the National Environmental Policy Act 4* (Dec. 1997) (CEQ's *Environmental Justice Guidance*), <https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf>. CEQ offers recommendations on how federal agencies can provide opportunities for effective community participation in the NEPA process, including identifying potential effects and mitigation measures in consultation with affected communities and improving the accessibility of public meetings, crucial documents, and notices. Columbia and Transco have provided opportunities for public involvement for environmental justice communities. For instance, Columbia advertised in minority-targeted and non-English-speaking media or website with available facts about the Virginia Reliability Project, placed signage in English and Spanish in frequently visited community locations in census block groups with a higher non-English speaking population, hosted virtual open houses conducted in Spanish, and formed a Community Advisory Committee to help examine potential environmental and social impacts of the project and foster broad stakeholder engagement with environmental justice communities. See Final EIS at 4-115 to 4-116. Transco reached out to several African-American civic or historical organizations. *Id.* at 4-117. Both Columbia and Transco employed a contractor or consultant to assist with environmental justice outreach and assessment. *Id.* at 4-115 to 4-117. Both companies have committed to continuing their outreach with environmental justice communities during construction and operation of the projects. See *id.* at 4-117, 4-134 to 4-136.

²⁰⁷ See generally EPA, *Promising Practices for EJ Methodologies in NEPA Reviews* (Mar. 2016) (*Promising Practices*) https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

²⁰⁸ See generally Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994). Minority populations are those groups that include: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic.

²⁰⁹ See *Promising Practices* at 21-25.

minority population in the block group affected is 10% higher than the aggregate minority population percentage in the county.²¹⁰

104. CEQ's *Environmental Justice Guidance* also directs low-income populations to be identified based on the annual statistical poverty thresholds from the U.S. Census Bureau. Using *Promising Practices*' low-income threshold criteria method, low-income populations are identified as block groups where the percent of low-income population in the identified block group is equal to or greater than that of the county.

105. To identify potential environmental justice communities in the project area, the final EIS used 2021 U.S. Census American Community Survey data²¹¹ for the race, ethnicity, and poverty data at the block group level.²¹² Additionally, in accordance with *Promising Practices*, Commission staff used EJScreen2.2, EPA's environmental justice mapping and screening tool, as an initial step to gather information regarding minority and low-income populations, potential environmental quality issues, environmental and demographic indicators, and other important factors.

106. Once Commission staff collected the block group level data,²¹³ as discussed in further detail below, staff conducted an impacts analysis for the identified environmental

²¹⁰ Final EIS at 4-118. For the Virginia Reliability Project, Commission staff selected Greensville County, Prince George County, the city of Petersburg, Sussex County, Surry County, Southampton County, Isle of Wight County, and the cities of Suffolk, Chesapeake, and Portsmouth, in which the facilities are proposed, as the comparable reference communities for the Virginia Reliability Project to ensure that affected environmental justice communities are properly identified. For the CEC Project, Commission staff selected Brunswick County, Greensville County, and Mecklenburg County, in which the facilities are proposed, as the comparable reference communities for the CEC Project to ensure that affected environmental justice communities are properly identified. Because the construction-related air emissions, noise, traffic, and visual impacts associated with the projects would occur within these communities, they are appropriate reference communities for the block groups.

²¹¹ U.S. Census Bureau, American Community Survey 2021 ACS 5-Year Estimates Detailed Tables, File# B17017, *Poverty Status in the Past 12 Months by Household Type by Age of Householder*, <https://data.census.gov/cedsci/table?q=B17017>; File #B03002 *Hispanic or Latino Origin by Race*, <https://data.census.gov/cedsci/table?q=b03002>.

²¹² See Final EIS at 4-119.

²¹³ See *id.*, app. D, tbl. D-13 (Minority Populations by Race and Low-Income Populations in the Vicinity of the Virginia Reliability Project) and tbl. D-14 (Minority

justice communities and evaluated health or environmental hazards, the natural physical environment, and associated social, economic, and cultural factors to determine whether the impacts to environmental justice communities are disproportionately high and adverse impacts and also whether those impacts were significant.²¹⁴ The final EIS assessed whether impacts on an environmental justice community were disproportionately high and adverse based on whether those impacts were predominately borne by that community, consistent with EPA's recommendations in *Promising Practices*.²¹⁵ Identified project impacts and Columbia's and Transco's proposed mitigation measures are discussed below.

107. The final EIS identifies the minority populations (by race and ethnicity) and low-income populations in Virginia, the counties affected by the projects, and census block groups crossed by the pipeline facilities or within 1 mile of proposed aboveground facilities (i.e., Emporia Compressor Station, Petersburg Compressor Station, Emporia Point of Receipt, and MS-831010 Point of Delivery related to the Virginia Reliability Project and Compressor Station 168 and the Emporia M&R Station related to the CEC Project) and contractor yards.²¹⁶ Thirty-four block groups out of forty-eight block groups within the geographic area of the entire Virginia Reliability Project are considered environmental justice communities.²¹⁷ Four block groups out of four total block groups within the geographic scope of the CEC Project are considered environmental justice

and Low-Income Populations in the Vicinity of the CEC Project).

²¹⁴ See *Promising Practices* at 33 (stating that “an agency may determine that impacts are disproportionately high and adverse, but not significant within the meaning of NEPA” and in other circumstances “an agency may determine that an impact is both disproportionately high and adverse and significant within the meaning of NEPA”).

²¹⁵ *Id.* at 44-46 (explaining that there are various approaches to determining whether an action will cause a disproportionately high and adverse impact, and that one recommended approach is to consider whether an impact would be “predominantly borne by minority populations or low-income populations”). We recognize that EPA and CEQ are in the process of updating their guidance regarding environmental justice and we will review and incorporate that anticipated guidance in our future analysis, as appropriate.

²¹⁶ Final EIS, app. D, tbl. D-13. Commission staff determined that a 1-mile radius was sufficiently broad considering the likely concentration of air emissions, noise, and traffic impacts proximal to the construction and operation activities. The final EIS found that potential impacts caused by the projects, in particular impacts to air quality, would not extend beyond one mile from the aboveground facilities and contractor yards. *Id.* at 4-118 to 4-119. We agree.

²¹⁷ *Id.* at 4-119.

communities.²¹⁸ The final EIS determined that potential impacts on the identified environmental justice communities may include socioeconomic impacts, traffic impacts, increased demand for temporary housing and public services, visual resources impacts, and noise and air quality impacts from construction and operation of both projects.²¹⁹ The construction of the Virginia Reliability Project may also have impacts on existing pollution and water resources, which could affect identified environmental justice communities.²²⁰ Environmental justice concerns are not present for other resource areas such as geology, soils, wildlife, and cultural impacts due to the minimal overall impact the project would have on these resources.

a. Socioeconomic and Traffic Impacts

i. Virginia Reliability Project

108. Project impacts on environmental justice communities may include impacts on socioeconomic factors and traffic. As discussed in the final EIS, Columbia will employ a peak temporary construction workforce for the Virginia Reliability Project of about 1,000 to 1,200 workers, up to half of which will be hired locally.²²¹ Because activities will be dispersed among two pipeline construction spreads and the aboveground facilities over a relatively large area and over a 20-month construction period, impacts on local communities, including nearby minority and low-income populations, would be moderate to minor. Use of local roads would increase during construction. Construction would add over 1,200 vehicle round trips per day to the roadway network in the six counties crossed by the project, and the final EIS states that this increased use would not be a substantial impact on traffic or the local use of roads.²²² The increased demand for short-term housing from non-local construction workers during construction of the Virginia Reliability Project would result in temporary, moderate impacts, and the demand for municipal services would be minor.²²³ No significant impacts on property values are anticipated from construction and operation of the Virginia Reliability Project.²²⁴ The

²¹⁸ *Id.* at 4-120.

²¹⁹ *Id.* at 4-122 & 4-130.

²²⁰ *Id.* at 4-122.

²²¹ *Id.*

²²² *Id.* at 4-130.

²²³ *Id.* at 4-122.

²²⁴ *Id.* at 4-110

local spending could indirectly result in general positive economic benefits in identified environmental justice communities.²²⁵

109. Columbia states it will promote local vendor opportunities within environmental justice communities by launching an online portal²²⁶ where businesses from environmental justice communities would be encouraged to apply to be a vendor for the project's prime contractor(s).²²⁷ Columbia indicates its project team has shared a press release about the portal with local press and continues to work with community organizations to promote opportunities to the public.²²⁸

110. The final EIS concludes that the Virginia Reliability Project's impacts on socioeconomics would not result in significant adverse effects on environmental justice populations.²²⁹ We agree.

ii. CEC Project

111. As discussed in the final EIS, Transco will employ a temporary workforce of about 255 workers, up to half of which will be hired locally.²³⁰ Transco estimates a peak local workforce of 100 workers for the Commonwealth Loop, 80 workers for Compressor Station 168, 25 workers at the Emporia M&R Station, and 25 workers each at the mainline valve and pig launcher (Southern Virginia Lateral milepost 91.03) and the regulator skid and pig receiver (Southern Virginia Lateral milepost 97.38). Because activities will be dispersed over a relatively large area and over a 9-month construction period, impacts on local communities, including nearby environmental justice communities would be minor. Construction would add about 216 vehicle round trips per day to the roadway network in the three counties crossed by the project, and the final EIS states that this increased use would not be a substantial impact on traffic or the local use of roads.²³¹ The increased demand for short-term housing from non-local construction

²²⁵ *Id.* at 4-123

²²⁶ *See* TC Energy, Welcome to the Virginia Reliability Project, <https://www.tcenergy.com/operations/natural-gas/virginia-reliability-project>.

²²⁷ Columbia Mar. 28, 2023 Environmental Information Response at 8.

²²⁸ Columbia July 31, 2023 Environmental Information Response at 15.

²²⁹ Final EIS at 4-123.

²³⁰ *Id.* at 4-130.

²³¹ *Id.*

workers during construction would result in temporary, minor impacts and the demand for municipal services would be minor.²³² No significant impacts on property values are anticipated from construction and operation of the CEC Project.²³³

112. Local spending during construction of the CEC Project could indirectly result in general positive economic benefits in the identified environmental justice communities.²³⁴ Transco states it implements inclusive hiring practices and works with community partners to ensure the workforce reflects the communities it serves.²³⁵ The final EIS concluded that the CEC Project's impacts on socioeconomics would not result in significant adverse effects on environmental justice communities.²³⁶ We agree.

iii. Cumulative Impacts

113. Because the final EIS inadvertently omitted a cumulative impacts analysis of socioeconomic impacts on environmental justice communities, we include the analysis here. Construction and operation of the Virginia Reliability Project, the CEC Project, and other projects in the geographic scope²³⁷ would result in a cumulative impact on socioeconomic factors and traffic in environmental justice communities. The level of cumulative impacts would likely depend on the overlap in construction periods, which is not known for most of the other projects at this time, and the size of the workforce. Most of the projects in the cumulative impacts area are small (with the exception of the solar and renewable projects) and would use the local workforce, which would not alter housing, transportation, and public service demands. If construction of a larger project or a combination of several smaller projects were to occur at the same time and in the same general location as the construction of the Virginia Reliability Project and the CEC Project, an influx of construction workers could temporarily strain housing and increase the demands on traffic and public services, such as police, fire, and medical services in environmental justice communities. However, the cumulative impacts on population, employment, housing, demand for public services, and traffic in environmental justice communities would be short-term and are not anticipated to be significant in environmental justice communities. The Virginia Reliability Project, the CEC Project,

²³² *Id.*

²³³ *Id.* at 4-110.

²³⁴ *Id.* at 4-130.

²³⁵ Transco Mar. 24, 2023 Environmental Information Response at 5.

²³⁶ Final EIS at 4-131.

²³⁷ *See* Final EIS, app. D at D-45 to D-64, tbl. D-15 & D-16.

and the other projects in the geographic scope would also have a beneficial long-term cumulative impact on government tax revenues. Because permanent employees would not be added, the Virginia Reliability Project and the CEC Project would not have long-term impacts on population, employment, housing, demand for public services, or traffic, and therefore would not contribute to any long-term cumulative impact on these factors in environmental justice communities.

b. Existing Pollution

i. Virginia Reliability Project

114. Numerous sites with potential or identified soil and groundwater contamination are within 0.25 mile of the Virginia Reliability Project workspaces, including sites with potential for contamination within 500 feet of the project.²³⁸ No Superfund sites are within 0.5 mile of the Virginia Reliability Project.²³⁹ As described in the final EIS, Columbia has consulted with the applicable agencies overseeing remediation of the sites within 500 feet of the project to determine the potential for activities to impact existing contamination.²⁴⁰ In addition, Columbia will implement its Unanticipated Contamination Contingency Plan, which has been reviewed by Commission staff, in the event of a discovery or suspicion of contaminated soil or groundwater and it will continue consultation with the applicable agencies.²⁴¹ We conclude that the Virginia Reliability Project would not significantly contribute to or be significantly impacted by soil or groundwater contamination in environmental justice communities.

ii. CEC Project

115. No existing contamination was identified within 0.25 mile of the CEC Project;²⁴² therefore, the final EIS did not address this topic relative to environmental justice communities for the CEC Project.²⁴³ We agree.

²³⁸ *Id.* at 4-123.

²³⁹ *Id.*

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² See FERC, *Guidance Manual for Environmental Report Preparation for Applications Filed under the Natural Gas Act* at 4-117 (recommending the 0.25-mile geographic scope).

²⁴³ Likewise, because the project will not contribute to contamination in the area,

c. **Water Resources**

i. **Virginia Reliability Project**

116. Columbia states it will implement the measures in its Spill Prevention, Containment, and Control Plan to minimize the potential for a spill to occur and limit the impact that a spill may have on groundwater resources.²⁴⁴ Columbia will not use groundwater during construction or operation of the Virginia Reliability Project.²⁴⁵

117. There are four public surface water intakes within three miles downstream of Virginia Reliability Project workspaces. In addition, the Virginia Reliability Project will be about 1,100 feet from the Burnt Mills Reservoir and will cross the Western Branch Reservoir. Construction near surface water intakes and drinking water reservoirs has the potential to impact water quality because stormwater runoff could lead to erosion and overland transport of sediment to nearby waterbodies. To avoid or minimize impacts, Columbia has committed to adhere to its Annual Standards, including the measures to reduce erosion and control sediment that are described in the final EIS, and will coordinate with the municipalities owning the water intakes. Columbia will cross all perennial waterbodies using HDD or a dry crossing method (dam and pump or flume), which would avoid or minimize impacts.²⁴⁶ The final EIS concludes that the Virginia Reliability Project's impacts on water resources would not result in significant adverse effects on environmental justice communities. We agree.

ii. **CEC Project**

118. Impacts by construction and operation of the CEC Project on water resources would not result in adverse impacts on environmental justice communities because the project will cross relatively small waterbodies and will not cross any sensitive waterbodies, and Transco will use dry crossing methods and implement the construction and mitigation measures described in Transco's Wetland and Waterbody Construction and Mitigation Procedures.²⁴⁷ We agree.

the final EIS did not analyze cumulative effects caused by the project on existing contamination.

²⁴⁴ Final EIS at 4-123 to 4-124.

²⁴⁵ *Id.*

²⁴⁶ *Id.* at 4-124.

²⁴⁷ *Id.* at 4-130

iii. Cumulative Impacts

119. Construction of the Virginia Reliability Project along with other projects in the geographic scope for environmental justice would result in a cumulative impact on surface waters through the potential for erosion and overland transport of sediment to nearby waterbodies in environmental justice communities.²⁴⁸ The contribution of the Virginia Reliability Project to cumulative impacts on surface waters in environmental justice communities would be less than significant because Columbia will implement the measures described in its Annual Standards.²⁴⁹

120. Transco will cross relatively small waterbodies and use dry construction methods at all waterbody crossings and will implement the measures described in Transco's Wetland and Waterbody Construction and Mitigation Procedures. Therefore, we conclude that the CEC Project would not contribute to cumulative impacts on surface waters in environmental justice communities.²⁵⁰

d. Visual Impacts

i. Virginia Reliability Project

121. Environmental justice communities could experience minor to moderate temporary visual impacts during pipeline construction and workspace restoration activities for the Virginia Reliability Project.²⁵¹ Some vegetation clearing impacts would be temporary because the construction workspaces will be restored after construction. Where the pipeline crosses natural and recreational areas, Columbia will construct the new pipeline replacement within the existing pipeline trench, which would minimize visual impacts.²⁵² At locations of tree clearing away from the existing pipeline right-of-way that are within environmental justice communities or in areas frequented by environmental justice communities, the visual impacts on environmental justice communities would be long-term and moderate.²⁵³

²⁴⁸ *Id.* at 4-200.

²⁴⁹ *Id.*

²⁵⁰ *Id.* at 4-200.

²⁵¹ *Id.* at 4-124, 4-200.

²⁵² *Id.* at 4-124.

²⁵³ *Id.*

122. Temporary visual impacts associated with construction at existing aboveground facilities for the Virginia Reliability Project would occur where existing vegetation does not provide visual screening.²⁵⁴ The modifications at these aboveground facilities would not increase the height of the existing facilities, and the current land use would remain the same.²⁵⁵ Columbia will also maintain existing forest areas between the aboveground facilities and nearby residences to minimize visual impacts. The Emporia Compressor Station, which is in an environmental justice community, is currently screened from view from surrounding properties by a dense tree buffer. In the event that construction should require removal of the row of trees that screens views of the Emporia Compressor Station, Columbia commits to replant a row of trees to maintain visual screening.²⁵⁶ The proposed modifications at the Emporia Point of Receipt, which is in the same environmental justice community as the compressor station, would be consistent with the current visual character of the site, so no long-term visual impacts would occur.²⁵⁷

123. The Petersburg Compressor Station is not in an environmental justice community and modifications would not be visible to the closest environmental justice communities, which are within a mile away.²⁵⁸ Modifications to the MS-831010 Point of Delivery, which is in an environmental justice community, and the use of contractor yards for equipment and material storage nearby would be visible to nearby residences, some of which are located about 975 feet away.²⁵⁹ The contractor yards would be returned to their current land use following construction, and the modifications to the MS-831010 Point of Delivery would be consistent with the current visual character of the site, so no long-term visual impacts would occur.²⁶⁰ The final EIS concludes that visual impacts on environmental justice communities from the project's aboveground facilities would not be significant.²⁶¹ We agree.

²⁵⁴ *Id.*

²⁵⁵ *Id.*

²⁵⁶ *Id.* at 4-125.

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ *Id.*

²⁶⁰ *Id.*

²⁶¹ *Id.* at 4-125, 4-200.

ii. CEC Project

124. The CEC Project would result in temporary visual impacts on environmental justice communities. Most visual impacts associated with the proposed Commonwealth Loop would occur during construction due to the presence of construction equipment, personnel, and disturbed soil.²⁶² Long-term visual impacts would occur in forested areas where the existing right-of-way would be expanded.²⁶³ These visual impacts would be minimized because the Commonwealth Loop would be collocated with the existing Transco Southern Virginia Lateral A-line. The existing Emporia M&R Station and existing Compressor Station 168 are located within identified environmental justice communities. However, these aboveground facilities are set back from surrounding residences and roads, and existing forested areas would be preserved to the extent possible to minimize visual impacts.²⁶⁴ Because work would occur mostly within Transco's existing pipeline right-of-way and existing aboveground facilities, the final EIS concludes that visual impacts associated with the CEC Project on environmental justice communities would not be significant.²⁶⁵ We agree.

iii. Cumulative Impacts

125. Construction and operation of the Virginia Reliability Project and other projects in the geographic scope would result in a cumulative visual impact on environmental justice communities through the clearing of vegetation and modification of aboveground facilities. However, the final EIS concludes that construction and operation of the Virginia Reliability Project's facilities within environmental justice communities would contribute to less than significant cumulative visual impacts on environmental justice communities because most of the facilities would be buried while the aboveground facilities would be modified or upgraded within previously disturbed areas.²⁶⁶

126. The final EIS concludes that the CEC Project would not contribute cumulative effects on visual resources in environmental justice communities because construction

²⁶² *Id.* at 4-131.

²⁶³ *Id.*

²⁶⁴ *Id.*

²⁶⁵ *Id.* at 4-131, 4-200.

²⁶⁶ *Id.* at 4-87, 4-200.

and operation would occur within Transco's existing rights-of-way and existing aboveground facilities.²⁶⁷ We agree.

e. **Air Emissions**

i. **Virginia Reliability Project**

127. Potential impacts on environmental justice communities from the Virginia Reliability Project include air quality impacts during construction and operation of the project.²⁶⁸ Construction would have short-term, minor increases of some air pollutants due to emissions from diesel or gasoline engines and the generation of fugitive dust due to the disturbance of soil and other dust-generating activities.²⁶⁹ Columbia will minimize exhaust emissions by limiting idling time of equipment if a residence is within 100 feet of a workspace, and by using low-sulfur diesel fuel.²⁷⁰ To mitigate dust emissions during construction, Columbia would implement measures that include watering exposed soil surfaces as needed, using crushed stone or gravel to stabilize road surfaces, and applying spray-on adhesives and mulch with tackifiers to disturbed soils. During commissioning at the Emporia Compressor Station, Columbia will conduct one emergency shutdown blowdown event and up to 10 blowdowns per unit, which would result in short-term methane emissions and small amounts of volatile organic compounds at each compressor station.²⁷¹ Based on the temporary nature of construction activities and the mitigation measures proposed by Columbia, the final EIS concludes that Virginia Reliability Project construction-related emissions are not expected to have a significant impact on local air quality or on nearby environmental justice communities.²⁷² We agree.

128. The Virginia Reliability Project would result in new stationary source operational emissions at the Emporia and Petersburg Compressor Stations. Columbia will install a new dual-drive reciprocating compressor at the Emporia Compressor Station. The new compressor will run exclusively as an electric drive during normal operating conditions but will be able to use system natural gas during abnormal operating conditions such as

²⁶⁷ *Id.*

²⁶⁸ *Id.* at 4-126 to 4-127.

²⁶⁹ *Id.* at 4-126.

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.*

power outages.²⁷³ At the Petersburg Compressor Station, Columbia will increase the horsepower of the two existing gas-fired turbines, which were recently upgraded, and install additional gas cooling (non-generating emission unit).²⁷⁴ The increase in horsepower would be accomplished by removing controls previously put in place to govern horsepower at the station and would not require any incremental facilities or construction. Dispersion modeling analyses determined that operation of Emporia and Petersburg Compressor Stations would not cause or contribute to an exceedance of the National Ambient Air Quality Standards (NAAQS), which have been designated to protect public health, including sensitive and vulnerable populations.²⁷⁵ The project would result in minor fugitive emissions at the pipeline and at all aboveground facilities, including the Emporia Point of Delivery and MS-831010 Point of Delivery.²⁷⁶

129. Although the Virginia Reliability Project would not contribute to exceedances of NAAQS, the final EIS discusses that NAAQS attainment alone may not ensure that there is no localized harm to public health due to cumulative emissions of volatile organic compounds and hazardous air pollutants, as well as issues such as the presence of non-project-related pollution sources, local health risk factors, disease prevalence, and access (or lack thereof) to adequate care. Due to the minor volume of hazardous air emissions and classification of the modified Emporia and Petersburg Compressor Stations as a minor/area source (i.e., not major) for hazardous air pollutants, the Virginia Reliability Project would not result in significant health impacts for nearby populations.²⁷⁷

130. Based on the minor quantity of fugitive emissions, the operational emissions, as well as the dispersion modeling analyses for the Emporia and Petersburg Compressor Stations, the final EIS concludes that the project would not result in significant impacts on air quality for environmental justice communities.²⁷⁸ We agree.

²⁷³ *Id.*

²⁷⁴ *Id.*

²⁷⁵ *See* 42 U.S.C. § 7409(b).

²⁷⁶ Final EIS at 4-127 to 4-128.

²⁷⁷ *Id.* at 4-127.

²⁷⁸ *Id.*

ii. CEC Project

131. For the CEC Project, impacts of construction emissions on air quality are anticipated to be minor and temporary.²⁷⁹ To minimize construction emissions, Transco has committed to properly maintain construction equipment, use buses or vans to transport construction workers to the extent practicable, and minimize fugitive emissions by implementing its Fugitive Dust Control Plan, which dictates the application of water to disturbed surfaces and limits speed on unpaved surfaces, as well as other measures.²⁸⁰ Based on the temporary nature of construction activities and the mitigation measures proposed by Transco, the final EIS concludes that construction of the CEC Project would not result in significant impacts on air quality environmental justice populations.²⁸¹ We agree.

132. Emissions associated with the CEC Project during operation would be from fugitive emissions and natural gas venting²⁸². At Compressor Station 168, Transco will install an electric-motor driven compressor; therefore, the only sources of air emissions from the project would be additional piping component fugitive emissions and natural gas venting operations. Other sources of operational emissions for the project would be pipeline fugitive emissions and natural gas venting from the Commonwealth Loop, pigging operations, and the Emporia M&R Station. Based on the minor quantity of emissions, which would not result in exceedances of the NAAQS, the final EIS concludes that the CEC Project would not result in significant impacts on air quality for environmental justice populations.²⁸³ We agree.

iii. Cumulative Impacts

133. The final EIS concludes that construction of the Virginia Reliability Project and the CEC Project, along with the other projects in the geographic scope of project where impacts on environmental justice communities could occur, would contribute to temporary increases in emissions from combustion engines used to power construction equipment, emissions from vehicles traveling to and from the construction sites, and fugitive emissions of dust resulting from equipment movement on dirt roads and earth-

²⁷⁹ *Id.* at 4-131.

²⁸⁰ *Id.*

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ *Id.* at 4-131 to 4-132.

disturbing activities.²⁸⁴ The final EIS concludes that cumulative impacts on air quality for environmental justice communities due to construction would not be significant.²⁸⁵ We agree.

134. The final EIS concludes that operation of the projects would contribute to cumulative impacts on air quality for environmental justice communities; however, this contribution would not be significant because operation of the Virginia Reliability Project would not result in exceedance of the NAAQS and the CEC Project will not include new natural gas-fired compression.²⁸⁶ We agree.

f. Noise Impacts

i. Virginia Reliability Project

135. Noise impacts during construction of the Virginia Reliability Project would be temporary (approximately 20 months).²⁸⁷ Nighttime construction activities may include pipeline construction using the HDD method and certain activities associated with hydrostatic testing, road and waterbody crossings, and tie-in/closure welds. Of the 16 proposed HDD sites, 13 are within environmental justice communities.²⁸⁸ Because unmitigated noise levels impacts may exceed 55 A-weighted decibels (dBA) at the closest noise sensitive area (NSA) to 4 of the 13 sites (Rountree North Pond, Nansemond River, Shell Road/Deep Creek Canal, and Elizabeth River 2), Columbia has committed to limit construction to daylight hours at these locations.²⁸⁹ However, although the final pipeline pullback operations of the HDDs would begin during daytime hours, these operations could continue into nighttime hours for a limited period because these operations must be completed without stopping to avoid the pipeline getting stuck and borehole collapse.²⁹⁰

²⁸⁴ *Id.* at 4-201.

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 4-201 to 4-203.

²⁸⁷ *Id.* at 4-164.

²⁸⁸ *Id.* at 4-128.

²⁸⁹ *Id.*

²⁹⁰ *Id.*

136. Activities at one HDD site (Shell Road/Deep Creek Canal), located within the City of Chesapeake, would exceed the City of Chesapeake noise requirements. The Shell Road/Deep Creek Canal HDD is within an environmental justice community. The nearest residence to this HDD is 50 feet away from the drilling entry and exit.²⁹¹ Columbia will implement acoustical barriers to reduce sound from HDD drilling.²⁹² Columbia has committed to offering landowners or renters of NSAs near the Shell Road/Deep Creek Canal either temporary relocation or compensation during pullback operations, which would take less than 24 hours.²⁹³

137. To ensure that nighttime construction activities do not result in adverse impacts on NSAs, the final EIS recommends that Columbia monitor nighttime noise levels during construction, document the noise levels in its biweekly status reports, and restrict the noise attributable to nighttime construction activities to no more than 48.6 dBA L_{eq} (24-hour equivalent sound level) at nearby NSAs (this recommendation is now adopted as Environmental Condition 16 in Appendix C to this order).²⁹⁴ Overall, we find that Columbia's proposed noise control measures, and the Environmental Condition 16 in this order, would ensure that noise impacts from construction of the Virginia Reliability Project would be temporary and would not result in significant noise impacts on NSAs in environmental justice communities.

138. During operation of the Virginia Reliability Project, the noise level increases resulting from operation of the modified Emporia Compressor Station and MS-831010 Point of Delivery, which are located in environmental justice communities, are expected to be less than 1 decibel at all NSAs, which likely would not be perceptible.²⁹⁵ The Emporia Point of Receipt is not projected to result in any increase in noise, while noise at the Petersburg Compressor Station is anticipated to decrease as a result of the project.²⁹⁶ To verify the accuracy of Columbia's noise estimates and ensure that the modified facilities operate in compliance with our requirements, the final EIS recommends that Columbia perform noise surveys within 6 months of placing in service the modified Emporia Compressor Station, the Petersburg Compressor Station, Emporia Point of Receipt, and MS-831010 Point of Delivery (which is included in Appendix C of this

²⁹¹ *Id.*

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ *Id.* at 4-129.

²⁹⁵ *Id.*

²⁹⁶ *Id.*

order as Environmental Conditions 17 and 18).²⁹⁷ Overall, we find that Columbia's proposed noise control measures, and the environmental conditions in this order, would ensure that noise impacts from operation of the Virginia Reliability Project would not result in significant noise impacts on NSAs in the vicinity of environmental justice communities.

ii. CEC Project

139. Noise impacts during construction of the CEC Project would be temporary (approximately nine months).²⁹⁸ Construction of the pipeline and aboveground facilities would result in increased noise levels that would likely be audible to identified environmental justice communities. Construction noise would occur primarily during daytime hours. Transco anticipates that the typical construction workday at project facilities would be limited to between 7:00 a.m. and 7:00 p.m. but may extend into nighttime hours in certain situations, such as strength and leak testing of pipeline segments, final tie-in welds and X-ray, compressor station electrical work, and certain pre-commissioning and commissioning activities. Nighttime construction activities would typically not generate significant noise. Transco does not propose to use the HDD method for pipeline construction.²⁹⁹ Overall, we find that Transco's proposed noise control measures would ensure that noise impacts from construction of the CEC Project would be temporary and would not result in significant noise impacts on NSAs in environmental justice communities.

140. The noise level increases at NSAs resulting from operation of the modified Compressor Station 168 would be 2 dBA or less and would be less than 1 dBA at the Emporia M&R Station.³⁰⁰ The noise level increases likely would not be perceptible to nearby residents. Noise level increases resulting from operation of the new Commonwealth Loop Regulator, which is in an identified environmental justice community, would be up to 5 dB, which would likely be a perceptible change, and may result in noise impacts on nearby residents.³⁰¹ The closest residents to this regulator, who live in an environmental justice community, would likely experience elevated noise

²⁹⁷ *Id.*

²⁹⁸ *Id.* at 2-25.

²⁹⁹ *Id.* at 4-132 to 4-133.

³⁰⁰ *Id.* at 4-173.

³⁰¹ *Id.*

levels; however, these noise level increases would not be significant.³⁰² Transco will implement noise control measures, including acoustically designed buildings, engine exhaust and air-inlet systems, low noise equipment, and blowdown silencers, to reduce sound generation at the facilities.³⁰³ However, to verify the accuracy of Transco's noise estimates and ensure that the modified compressor station and meter stations operate in compliance with our requirements, the final EIS recommends a requirement that Transco perform noise surveys within 6 months of placing in service the modified Compressor Station 168, the modified Emporia M&R Station, and the Commonwealth Loop Regulator (included in Appendix B of this order as Environmental Conditions 14 and 15).³⁰⁴ Overall, we find that Transco's proposed noise control measures, and the environmental conditions in this order, would ensure that noise impacts from operation of the CEC Project would not result in significant noise impacts on NSAs in the vicinity of environmental justice communities.

iii. Cumulative Impacts

141. Noise levels resulting from construction of the Virginia Reliability Project and the CEC Project, along with the other projects within the geographic scopes for environmental justice would vary over time and would depend upon the number and type of equipment operating, the level of operation, the timing of construction, and the distance between sources and receptors. The final EIS concludes that noise impacts from construction of the projects on environmental justice communities would not be significant.³⁰⁵ During operation, Columbia and Transco have committed to ensuring that noise attributable to each facility would not exceed 55 dBA L_{dn} at the NSAs, including those located in environmental justice communities. The final EIS concludes that the noise attributable to operation of the projects would not result in significant cumulative impacts on nearby residents and NSAs.³⁰⁶ Therefore, operation of projects would not result in significant cumulative noise impacts on environmental justice communities.³⁰⁷ We agree.

³⁰² *Id.* at 4-175.

³⁰³ *Id.* at 4-174.

³⁰⁴ *Id.* at 4-133.

³⁰⁵ *Id.* at 4-199.

³⁰⁶ *Id.*

³⁰⁷ *Id.* at 4-201.

g. Environmental Justice Conclusion

i. Virginia Reliability Project

142. As described in the final EIS, impacts associated with the construction and operation of the Virginia Reliability Project on environmental justice communities would be disproportionate and adverse because they would be predominately borne by environmental justice communities.³⁰⁸ However, the project construction impacts associated with traffic, temporary housing, existing pollution, water resources, visual resources, air quality, and construction noise for these components would be temporary and less than significant because Columbia will implement the mitigation measures described in the final EIS.³⁰⁹ In addition, permanent impacts on environmental justice communities associated with noise and air quality from operation of the Virginia Reliability Project would be less than significant.³¹⁰ We agree.

ii. CEC Project

143. As described in the final EIS, impacts associated with the construction and operation of the CEC Project on environmental justice communities would be disproportionate and adverse because they would be predominately borne by environmental justice communities.³¹¹ However, the project construction impacts associated with traffic, air quality, and construction noise for these components would be temporary and less than significant because Transco has committed to implement mitigation measures as described in final EIS.³¹² In addition, permanent impacts on environmental justice communities associated with noise, visual resources, and air quality from operation of the CEC Project would be less than significant.³¹³ We agree.

5. Environmental Analysis Conclusion

144. We have reviewed the information and analysis contained in the final EIS regarding potential environmental effects of the Virginia Reliability Project and CEC

³⁰⁸ *Id.* at 4-137.

³⁰⁹ *See id.* at 4-133 to 4-135.

³¹⁰ *Id.* at 4-137.

³¹¹ *Id.*

³¹² *See id.* at 4-135 to 4-136.

³¹³ *Id.*

Project, as well as the other information in the record. We are accepting the environmental recommendations in the final EIS and are including them as conditions in the appendix to this order. Based on our consideration of this information, as supplemented or clarified herein, we agree with the conclusions presented in the final EIS and find that the projects, if implemented as described in the final EIS, and further addressed herein, are environmentally acceptable actions. We note that the analysis in the final EIS provides substantial evidence for our conclusions in this order, but that it is the order itself that serves as the record of decision, consistent with the Commission's obligations under NEPA and the Administrative Procedure Act. For that reason, to the extent that any of the analysis in the final EIS is inconsistent with or modified by the Commission's analysis and findings in the order, it is the order that controls and we do not rely on or adopt any contrary analysis in the final EIS.

V. Conclusion

145. We find that Transco and Columbia demonstrated a need for the CEC and Virginia Reliability Projects, which will enable them to provide firm transportation service to Virginia Gas. Further, the projects will not have adverse operational or economic impacts on existing shippers or other pipelines and their existing customers and the project's benefits will outweigh any adverse effects on the interests of landowners and surrounding communities. Based on the discussion above, we find under section 7 of the NGA that the public convenience and necessity requires approval of the projects, subject to the conditions in this order.

146. Compliance with the environmental conditions appended in our orders is integral to ensuring that the environmental impacts of approved projects are consistent with those anticipated by our environmental analyses. Thus, Commission staff carefully reviews all information submitted. Only when staff is satisfied that the applicant has complied with all applicable conditions will a notice to proceed with the activity to which the conditions are relevant be issued. We also note that the Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the projects, including authority to impose any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order, as well as the avoidance or mitigation of unforeseen adverse environmental impacts resulting from project construction and operation.

147. 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

local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.³¹⁴

148. At a hearing held on November 16, 2023, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the applications, 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 CEC Project, as described and conditioned herein and as more fully described in the application and subsequent filings, including any commitments made therein.

(B) A certificate of public convenience and necessity is issued to Columbia authorizing it to construct and operate the Virginia Reliability Project, as described and conditioned herein and as more fully described in the application and subsequent filings, including any commitments made therein.

(C) The certificate authority issued in Ordering Paragraphs (A) and (B) is conditioned on:

(1) Transco's and Columbia's projects being constructed and made 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 and Columbia'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 Appendix B to this order and Columbia's compliance with the

³¹⁴ 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 *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); *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).

environmental conditions listed in Appendix C to this order; and

(4) Transco and Columbia each filing a written statement affirming that they have executed firm contracts for the capacity levels and terms of service represented in their filed precedent agreements, prior to commencing construction.

(D) Columbia is granted approval to abandon the facilities described in this order, and as more fully described in the application.

(E) Columbia shall notify the Commission within 10 days of the abandonment of the facilities.

(F) Transco's proposed initial incremental firm recourse reservation charge and usage charge under Rate Schedule FT are approved as the initial recourse charges for the CEC Project.

(G) Transco's proposal to charge generally-applicable system fuel retention percentage and system electric power rates is approved.

(H) Columbia's proposed initial incremental firm recourse reservation charge and usage charge under Rate Schedule FTS-VRP are approved as the initial recourse charges for the Virginia Reliability Project.

(I) Columbia's proposal to charge its system transportation retention rate for the Virginia Reliability Project using its RAM, EPCA, TCRA and OTRA surcharges is approved.

(J) Columbia is granted a pre-determination to roll the costs of the Virginia Reliability Project into its system rates in a future NGA section 4 rate case, absent a significant change in circumstances.

(K) Transco and Columbia 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 or Columbia. Transco and Columbia shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Commissioner Danly is not participating.
Commissioner Clements is dissenting in part with a separate statement attached.
Commissioner Christie is concurring with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A – Intervenors

Parties in CP22-502-000 Only

Atlanta Gas Light Company

Center for LNG

Duke Energy Carolinas, LLC

Duke Energy Progress, LLC

Mecklenburg County Board of Supervisors

Natural Gas Supply Association

Philadelphia Gas Works

Piedmont Natural Gas Company, Inc.

Parties in CP22-503-000 Only

Antero Resources Corporation

City of Charlottesville, Virginia

City of Richmond, Virginia

EQT Energy, LLC

MU Marketing LLC

Nansemond Indian Nation

New York State Electric & Gas Corporation

Virginia Natural Gas, Inc.

Parties in Both Proceedings

American Gas Association

Chesapeake Climate Action Network

Columbia Gas of Virginia, Inc.

Energy Transfer, LP

Exelon Corporation (on behalf of Delmarva Power & Light Company and Baltimore Gas and Electric Company)

Mothers Out Front Virginia

National Grid Gas Delivery Companies

New Jersey Natural Gas Company

NJR Energy Services Company

Sierra Club

Appendix B - Environmental Conditions

As recommended in the final Environmental Impact Statement (EIS), and otherwise amended herein, this authorization includes the following conditions.

Commonwealth Energy Connector Project

1. Transcontinental Gas Pipe Line Company, LLC (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 receive approval in writing from the Director of the Office of Energy Projects (OEP), or the Director's designee, **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 Commonwealth Energy Connector Project. This authority shall allow:
 - a. the modification of conditions of the order;
 - b. stop-work authority; and
 - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.

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 (EI), and contractor personnel would be informed of the EI's authority and have been or would 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 soon as they are available, and before the start of construction**, Transco shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the order. All requests for modifications of environmental conditions of the order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Transco's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Transco's right of eminent domain granted under NGA 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 maps/sheets 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, or the Director's designee, **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, or the Director's designee. Transco must file revisions to the plan as schedules change. The plan shall identify:

- a. how Transco would 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 would 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 on-site construction and inspection personnel;
- c. the number of EIs assigned, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
- e. the location and dates of the environmental compliance training and instructions Transco would give to all personnel involved with construction and restoration (initial and refresher training as the Commonwealth Energy Connector 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 would 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 on-site 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 **biweekly** basis until all construction and restoration activities are complete. On request, these status reports would 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 the Commonwealth Energy Connector Project, 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 EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
- d. a description of the corrective 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, or the Director's designee. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Commonwealth Energy

Connector 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 Commonwealth Energy Connector Project.

- a. In its letter to affected landowners, Transco shall:
 - i. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - ii. instruct the landowners that if they are not satisfied with the response, they should call Transco's Hotline; 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 **biweekly** 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, would be resolved, or why it has not been resolved.

10. Transco must receive written authorization from the Director of OEP, or the Director's designee, **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, or the Director's designee, **before placing the Commonwealth Energy Connector Project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Commonwealth Energy Connector 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 would be consistent with all applicable conditions; or

- b. identifying which of the conditions in the order Transco has complied with or would comply with. This statement shall also identify any areas affected by the Commonwealth Energy Connector Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

13. All conditions attached to the water quality certification except those that the Director of OEP, or the Director's designee, may identify as waived pursuant to 40 CFR § 121.9, constitute mandatory conditions of the Certificate Order. **Prior to construction**, Transco shall file, for review and written approval of the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions.

14. Transco shall file a noise survey with the Secretary **no later than 60 days** after placing the modified Compressor Station 168 in service. If a full power load condition noise survey is not possible, Transco shall provide an interim survey at maximum possible horsepower load and provide the full load survey **within 6 months**. If the noise attributable to the operation of the equipment at the compressor station under interim or full horsepower load conditions exceeds a day-night sound level (L_{dn}) of 55 dBA at any nearby NSAs, Transco shall file a report on what changes are needed and shall install additional noise controls to meet the level **within 1 year** of the in-service date. Transco shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

15. Transco shall file noise surveys with the Secretary **no later than 60 days** after placing the modified Emporia M&R Station and Commonwealth Loop Regulator into service. If a full-flow rate noise survey at the station's maximum design capacity is not possible, Transco shall provide an interim survey at the maximum possible flow rate and shall provide the full flow rate survey **within 6 months**. If the noise attributable to the operation of the meter station and regulator at interim or full flow rate conditions exceeds 55 dBA L_{dn} at any nearby NSAs, Transco shall file a report on what changes are needed and shall install additional noise controls to meet that level **within 1 year** of the in-service date. Transco shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

Appendix C - Environmental Conditions

As recommended in the final Environmental Impact Statement (EIS), and otherwise amended herein, this authorization includes the following conditions.

Virginia Reliability Project

1. Columbia Gas Transmission, LLC (Columbia) 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. Columbia must:

- a. request any modification to these procedures, measures, or conditions in a filing with the 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 receive approval in writing from the Director of OEP, or the Director's designee, **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 Virginia Reliability Project. This authority shall allow:

- a. the modification of conditions of the order;
- b. stop-work authority; and
- c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.

3. **Prior to any construction**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel would be informed of the EI's authority and have been or would 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 soon as they are available, and before the start of construction**, Columbia shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than

1:6,000 with station positions for all facilities approved by the order. All requests for modifications of environmental conditions of the order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Columbia's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Columbia's right of eminent domain granted under NGA 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. Columbia shall file with the Secretary detailed alignment maps/sheets 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, or the Director's designee, **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**, Columbia shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee. Columbia must file revisions to the plan as schedules change. The plan shall identify:

- a. how Columbia would 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 Columbia would 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 on-site construction and inspection personnel;
 - c. the number of EIs assigned, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Columbia would give to all personnel involved with construction and restoration (initial and refresher training as the Virginia Reliability 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 Columbia's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Columbia would 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 on-site personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Columbia 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, Columbia shall file updated status reports with the Secretary on a **biweekly** basis until all construction and restoration activities are complete. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. an update on Columbia's efforts to obtain the necessary federal authorizations;
- b. the construction status of the Virginia Reliability Project, 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 EI during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
- d. a description of the corrective 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 Columbia from other federal, state, or local permitting agencies concerning instances of noncompliance, and Columbia's response.

9. Columbia 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, or the Director's designee. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Virginia Reliability Project and restoration of the right-of-way. **Prior to construction**, Columbia shall mail the complaint procedures to each landowner whose property would be crossed by the Virginia Reliability Project.

- a. In its letter to affected landowners, Columbia shall:
 - i. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a

- landowner should expect a response;
 - ii. instruct the landowners that if they are not satisfied with the response, they should call Columbia's Hotline; 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 Columbia's Hotline, they should contact the Commission's Landowner Helpline at 877-337-2237 or at LandownerHelp@ferc.gov.
 - b. In addition, Columbia shall include in its **biweekly** 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, would be resolved, or why it has not been resolved.

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

11. Columbia must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Virginia Reliability Project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Virginia Reliability Project are proceeding satisfactorily.

12. **Within 30 days of placing the authorized facilities in service**, Columbia 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 would be consistent with all applicable conditions; or
- b. identifying which of the conditions in the order Columbia has complied with or would comply with. This statement shall also identify any areas affected by the Virginia Reliability 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**, Columbia shall file with the Secretary, for review and written approval by the Director of OEP or the Director's designee, evidence of landowner concurrence with the site-specific construction plans for construction workspace within 10 feet of a residence unless the workspace is part of the existing maintained right-of-way. If Columbia is unable to obtain concurrence, Columbia shall file revised site-specific construction plans that maintain a 10-foot buffer between the residence and the project workspace.

14. Columbia **shall not begin** construction of the Virginia Reliability Project **until** it files with the Secretary a copy of the determination of consistency with the Virginia Coastal Zone Management Program.

15. Columbia **shall not begin** construction of facilities and/or use of all staging, storage, or temporary work areas and new or to-be-improved access roads **until**:

- a. Columbia files with the Secretary:
 - i. any remaining cultural resources investigation report(s);
 - ii. site evaluation report(s) and avoidance/treatment plan(s), as required; and
 - iii. comments on the cultural resources reports and plans from the Virginia State Historic Preservation Office and/or tribes, as applicable.
- 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, or the Director's designee, approves the cultural resources reports and plans, and notifies Columbia in writing that treatment plans/mitigation measures may be implemented and/or construction may proceed.

All materials filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "**CUI//PRIV-DO NOT RELEASE.**"

16. **During nighttime construction and horizontal directional drilling (HDD) activities** between 7:00 p.m. and 7:00 a.m., Columbia shall monitor noise levels, document the noise levels in the **biweekly** status reports, and restrict the noise attributable to nighttime construction activities to no more than 48.6 dBA 24-hour equivalent sound level at NSAs.

17. Columbia shall file a noise survey with the Secretary **no later than 60 days** after placing the modified Emporia and Petersburg Compressor Stations in service. If a full

power load condition noise survey is not possible, Columbia shall provide an interim survey at maximum possible horsepower load and provide the full load survey **within 6 months**. If the noise attributable to the operation of the equipment at the compressor stations under interim or full horsepower load conditions exceeds an L_{dn} of 55 dBA at any nearby NSAs, Columbia shall file a report on what changes are needed and shall install additional noise controls to meet the level **within 1 year** of the in-service date. Columbia shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

18. Columbia shall file noise surveys with the Secretary **no later than 60 days** after placing the modified Emporia Point of Receipt and MS-831010 Point of Delivery stations into service. If a full-flow rate noise survey at the station's maximum design capacity is not possible, Columbia shall provide an interim survey at the maximum possible flow rate and shall provide the full flow rate survey **within 6 months**. If the noise attributable to the operation of the meter stations at interim or full flow rate conditions exceeds 55 dBA L_{dn} at any nearby NSAs, Columbia shall file a report on what changes are needed and shall install additional noise controls to meet that level **within 1 year** of the in-service date. Columbia shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Transcontinental Gas Pipe Line Company, LLC
Columbia Gas Transmission, LLC

Docket Nos. CP22-502-000
CP22-503-000

(Issued November 16, 2023)

CLEMENTS, Commissioner, *dissenting in part*:

1. I concur with the result of today's Order, but dissent from its discussion regarding the Commission's purported inability to assess the significance of the impacts of greenhouse gas (GHG) emissions.¹ The majority's insistence that there are no acceptable tools for determining the significance of GHG emissions remains unsupported and gains nothing through nearly constant repetition in Commission orders issued under sections 3 and 7 of the Natural Gas Act.

2. In my concurrence in *Transco*, I explained the history of the language in Paragraphs 100 and 101 of the Order,² which is the so-called "*Driftwood* compromise."³ In *Driftwood*, the majority suddenly adopted new language declaring that there are no methods for assessing the significance of GHG emissions, and particularly criticizing the Social Cost of GHGs protocol.⁴ I have dissented from this language in *Driftwood* and subsequent orders for two reasons: (1) it reflects a final Commission decision that it cannot determine the significance of GHG emissions, despite the fact the Commission has never responded to comments in the GHG Policy Statement docket⁵ addressing methods for doing so; and (2) the language departs from previous Commission precedent

¹ *Transcon. Gas Pipe Line Co.*, 185 FERC ¶ 61,130, at PP 100-101 (2023) (Order).

² *See Transcon. Gas Pipe Line Co.*, 184 FERC ¶ 61,066 (2023) (Clements, Comm'r, concurring at PP 2-3) (*Transco*).

³ *See id.* (Phillips, Chairman, and Christie, Comm'r, concurring at PP 1-2).

⁴ *See Driftwood Pipeline LLC*, 183 FERC ¶ 61,049, at PP 61, 63 (2023) (*Driftwood*).

⁵ Docket No. PL21-3.

without reasoned explanation, thereby violating the Administrative Procedure Act.⁶ I dissent from Paragraphs 100 and 101 of this Order for the same reasons.

3. As I have said before, I do not know whether the Social Cost of GHGs protocol or another tool can or should be used to determine significance. That is because the Commission has not seriously studied the answer to that question. Rather, the majority simply decided there is no acceptable method, with no explanation of why the Commission departed from the approach taken in earlier certificate orders.⁷ I reiterate that the Commission should decide the important unresolved issues relating to our

⁶ See *Driftwood*, 183 FERC ¶ 61,049 (Clements, Comm'r, dissenting at PP 2-3 & n.161); see also *Texas LNG Brownsville LLC*, 185 FERC ¶ 61,079 (2023) (Clements, Comm'r, dissenting at PP 9-10); *Rio Grande LNG, LLC*, 185 FERC ¶ 61,080 (2023) (Clements, Comm'r, dissenting at PP 9-10); *Gas Transmission Northwest, LLC*, 185 FERC ¶ 61,035 (2023) (Clements, Comm'r, concurring in part and dissenting in part at PP 7-8); *WBI Energy Transmission, Inc.*, 185 FERC ¶ 61,036 (2023) (Clements, Comm'r, dissenting in part at PP 2-3); *Venture Global Plaquemines LNG, LLC*, 185 FERC ¶ 61,037 (2023) (Clements, Comm'r, dissenting in part at PP 2-3); *Texas Eastern Transmission, LP*, 185 FERC ¶ 61,038 (2023) (Clements, Comm'r, dissenting in part at PP 2-3); *Trailblazer Pipeline Company LLC*, 185 FERC ¶ 61,039 (2023) (Clements, Comm'r, dissenting in part at PP 2-4); *Equitrans, L.P.*, 185 FERC ¶ 61,040 (2023) (Clements, Comm'r, dissenting in part at PP 2-4); *Port Arthur LNG Phase II, LLC*, 184 FERC ¶ 61,184 (2023) (Clements, Comm'r, dissenting in part at PP 2-3); *Venture Global Calcasieu Pass, LLC*, 184 FERC ¶ 61,185 (2023) (Clements, Comm'r, dissenting in part at PP 2-4); *Northern Natural Gas Company*, 184 FERC ¶ 61,186 (2023) (Clements, Comm'r, dissenting in part at PP 2-3); *Texas Eastern Transmission, LP*, 184 FERC ¶ 61,187 (2023) (Clements, Comm'r, dissenting in part at PP 2-4); *Equitrans, L.P.*, 183 FERC ¶ 61,200 (2023) (Clements, Comm'r dissenting at PP 2-3); *Commonwealth LNG, LLC*, 183 FERC ¶ 61,173 (2023) (Clements, Comm'r, dissenting at PP 5-8); *Rio Grande LNG, LLC*, 183 FERC ¶ 61,046 (2023) (Clements, Comm'r, dissenting at PP 14-15); *Texas LNG Brownsville LLC*, 183 FERC ¶ 61,047 (2023) (Clements, Comm'r, dissenting at PP 14-15).

⁷ Before its decision in *Driftwood*, the Commission had explained that it was not determining the significance of GHG emissions because the issue of how to do so was under consideration in the GHG Policy Statement docket. See, e.g., *Transcon. Gas Pipe Line Co.*, 182 FERC ¶ 61,006, at P 73 & n.174 (2023); *Columbia Gas Transmission, LLC*, 182 FERC ¶ 61,171, at P 46 & n.93 (2023). To depart from prior precedent without explanation violates the Administrative Procedure Act. See, e.g., *West Deptford Energy, LLC v. FERC*, 766 F.3d 10, 17 (D.C. Cir. 2014) (“[T]he Commission cannot depart from [prior] rulings without providing a reasoned analysis. . . .”) (citations omitted).

assessment of GHG emissions through careful deliberation in a generic proceeding with full transparency.

For these reasons, I respectfully dissent in part.

Allison Clements
Commissioner

