

161 FERC ¶ 61,200
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, and Robert F. Powelson.

Columbia Gas Transmission, LLC

Docket No. CP16-38-000

ORDER ISSUING CERTIFICATE

(Issued November 17, 2017)

1. On December 30, 2015, Columbia Gas Transmission, LLC (Columbia) filed an application under section 7(c) of the Natural Gas Act (NGA)¹ and Part 157 of the Commission's regulations² for authorization to construct, modify, and operate certain natural gas pipeline, compression, and appurtenant facilities in Braxton, Clay, Grant, Hardy, Kanawha, Pendleton, Randolph, and Upshur Counties, West Virginia, and Clark, Fairfax, Fauquier, Loudoun, Shenandoah, and Warren Counties, Virginia (WB XPress Project). The purpose of the WB XPress Project is to create capacity to provide an additional 1.3 million dekatherms (MMDth) per day of bi-directional firm transportation service to markets in western West Virginia and northern Virginia.

2. As discussed below, the Commission will grant the requested certificate authorizations, subject to certain conditions.

I. Background and Proposal

3. Columbia,³ a Delaware limited liability company, is a natural gas company as defined by section 2(6) of the NGA,⁴ engaged in the transportation and storage of natural

¹ 15 U.S.C. § 717f(c) (2012).

² 18 C.F.R. pt. 157 (2017).

³ Columbia Gas Transmission, LLC is an indirect subsidiary of Columbia Pipeline Group, Inc.

⁴ 15 U.S.C. § 717a(6) (2012).

gas in interstate commerce, subject to the Commission's jurisdiction. Columbia owns and operates transportation and storage facilities in Delaware, Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia.

4. As detailed in Columbia's application, in 1949, the Federal Power Commission (FPC), the Commission's predecessor, originally issued a certificate of public convenience and necessity to Columbia's predecessor to construct and operate Lines WB and VB, which consisted of approximately 268 miles of 26-inch-diameter pipeline located in Virginia and West Virginia.⁵ In 1954, the FPC authorized the construction and operation of approximately 105.8 miles of 26-inch-diameter pipeline looping along seven segments of the WB Line (WB-Loop) and VB Line (VB-Loop).⁶ The construction of 2.5 miles of 24-inch-diameter pipeline (Line WB-6) connected Lines WB and WB-Loop to Columbia's Gladly Storage Field in 1964.⁷ In 1967, the FPC approved the construction of 20.3 miles of 36-inch-diameter pipeline looping, originating in West Virginia (Line WB-5) and extending into Virginia (Line VB-5).⁸ Columbia abandoned, partially in-place and partially by removal, approximately 22 miles of Line WB in West Virginia in 1985.⁹

5. In this application, Columbia requests authorization to construct, modify, and operate 26.2 miles of replacement pipeline and 3.1 miles of new pipeline of varying diameters associated with its Virginia and West Virginia facilities. Specifically, in Fairfax County, Virginia, Columbia requests authorization to construct approximately 2.2 miles of new 12-inch-diameter natural gas pipeline (Line VA-1), approximately 1,800 feet of new dual 20-inch-diameter natural gas pipelines (Lines VA-2 and VA-3), and associated appurtenances. In West Virginia, Columbia requests authorization to construct, modify, and operate the following pipeline facilities:

- Line WB-5 Extension: construct approximately 0.3 mile of new 36-inch-

⁵ *Atlantic Seaboard Corp.*, 8 FPC 650 (1949).

⁶ *Atlantic Seaboard Corp.*, 13 FPC 918 (1954).

⁷ *Atlantic Seaboard Corp.*, 31 FPC 1581 (1964).

⁸ The looping pipelines originated at Columbia's existing Lost River Compressor Station and extended in a westerly direction for approximately 12.8 miles in Hardy County, West Virginia, and in an easterly direction from the same compressor station for approximately 7.5 miles in Hardy County, West Virginia, and Shenandoah County, Virginia. *Atlantic Seaboard Corp.*, 38 FPC 595 (1967).

⁹ *Columbia Gas Transmission Corp.*, 40 FERC ¶ 62,297 (1987).

diameter natural gas pipeline from a new Elk River Compressor Station to the Panther Mountain Regulator Station in Kanawha County, West Virginia;

- Line WB-22: construct approximately 0.6 mile of new 36-inch-diameter natural gas pipeline extending from the new Elk River Compressor Station to the Panther Mountain Regulator Station, and ending at the proposed Line WB-22 Receiver Site in Kanawha County, West Virginia;
- Line WB Replacement: replace, by lift and lay, approximately 25.5 miles of 26-inch-diameter natural gas pipeline loop and associated appurtenances in Randolph and Pendleton Counties, West Virginia;
- Line WB Replacements #1-5: replace five sections, totaling 0.5 mile, of 26-inch-diameter natural gas pipeline between mileposts (MP) 134.6 and 146.4 in Pendleton, Grant, and Hardy Counties, West Virginia.
- Line WB-5 Replacement: replace, by lift and lay, approximately 1,185 feet (0.2 mile) of 36-inch-diameter natural gas pipeline between MP 4.5 and 4.7 in Grant County, West Virginia.

6. Additionally, Columbia requests authorization to construct, modify, and operate the following aboveground facilities:

West Virginia:

- Construct a new 31,800 horsepower (hp) gas turbine-driven compressor station with two compressor units at approximately MP 0.3 of the Line WB-5 Extension in Kanawha County, West Virginia (Elk River Compressor Station);
- Install new valve sites and pig launcher/receiver facilities along Line WB-5 in Kanawha, Grant, and Clay Counties, West Virginia;
- Modify the existing Cleveland Compressor Station in Upshur County, West Virginia, by installing two new 15,900 hp gas-fired, turbine compressor units and restaging two existing units to increase station horsepower by 31,800 hp, to a new total of 53,630 hp;
- Modify the existing Files Creek Compressor Station in Randolph County, West Virginia, by installing two new 10,915 hp gas-fired, turbine compressor units and uprating two existing units from 9,311 hp to 10,915 hp to increase station horsepower by 25,038 hp, to a new total of 43,660 hp;
- Modify the existing Seneca Compressor Station in Pendleton County, West Virginia, by installing one new 10,915 hp gas-fired, turbine compressor unit and uprating one existing unit from 13,750 hp to 15,900 hp to increase station horsepower by 13,065 hp, to a new total of 43,575 hp;

- Modify the existing Lost River Compressor Station in Hardy County, West Virginia, by installing two new 15,900 hp gas-fired, turbine compressor units and uprating two existing gas-fired, turbine units from 8,690 hp to 10,915 hp to increase station horsepower by 36,250 hp, to a new total of 59,405 hp;
- Modify existing pig launcher/receiver facilities and pipeline appurtenances at the Frametown Compressor Station in Braxton County, West Virginia; and
- Modify four existing valve sites (Glady, Dink, Whitmer, and Smokehole Valve Sites) and one regulator station (Panther Mountain Regulator Station) in Kanawha County, West Virginia.

Virginia:

- Construct a new 8,000 hp electric-driven compressor station with two compressor units at MP 0.0 of the new Line VA-1 in Fairfax County, Virginia (Chantilly Compressor Station);
- Construct a receiver facility at the end of the proposed Line VA-1 in Fairfax County, Virginia;
- Modify the existing Strasburg Compressor Station in Shenandoah County, Virginia, by installing two new 10,915 hp gas-fired, turbine units, one new 15,900 gas-fired, turbine unit, and uprating one existing gas-fired, turbine unit from 17,800 hp to 20,500 hp, for a new total station horsepower of 40,430 hp;¹⁰
- Install a new meter station and appurtenances in Loudoun County, Virginia; and
- Modify the existing Dysart Valve Site in Shenandoah County, Virginia, and one metering station at the Nineveh Valve Site in Warren County, Virginia.

7. Columbia also proposes to uprate or restore the maximum allowable operating pressures (MAOP) on the following segments of the existing WB and VB Lines:

VB Lines (Virginia):

- Line VB-5: increase pressure incrementally along approximately 70.4 miles of Line VB-5 to restore this segment to its originally certificated

¹⁰ In addition, Columbia plans to physically remove two existing 8,900 hp units that presently serve as standby compression.

MAOP of 1,000 pounds per square inch gauge (psig) in Shenandoah, Warren, Clark, Fauquier, and Loudoun Counties, Virginia.¹¹

WB Lines (West Virginia):

- Line WB-5: increase pressure incrementally along approximately 72.4 miles of Line WB-5 to restore the originally certificated MAOP of 1,000 psig in Upshur, Randolph, Pendleton, Grant, and Hardy Counties, West Virginia;¹²
- Line WB-6: increase pressure incrementally along approximately 2.4 miles of Line WB-6 to 1,000 psig MAOP in Randolph County, West Virginia; and
- Line WB-5: increase pressure incrementally along approximately 22.1 miles of Line WB-5 Segment to 1,000 psig in Pendleton, Grant, and Hardy Counties, West Virginia.

8. Columbia states that the WB XPress Project would create capacity to provide an additional 1.3 MMDth per day of bi-directional firm transportation service to markets in western West Virginia and northern Virginia.

9. Columbia held an open season for the WB XPress Project from March 11, 2014, to April 4, 2014, for capacity to eastern delivery points (between 500,000 dekatherms (Dth) per day and 1.26 MMDth per day) and western delivery points (between 400,000 Dth per day and 800,000 Dth per day).¹³ Columbia states that it executed precedent agreements with a large local distribution company and two producers for the entire 1.3 MMDth per

¹¹ In order to avoid disruption of normal operations, Columbia proposes to use two portable 300 hp temporary compression units to achieve the incremental pressure increases required for MAOP restoration and uprating for the WB XPress Project. Columbia would use the portable compression units to incrementally increase pressure within certain pipeline segments by increasing each segment by 50 psig every hour until a pressure of 1,000 psig is achieved. Columbia would move the temporary compression units sequentially, from east to west, as needed between the following facilities: the Loudoun Compressor Station, Shenandoah River West Valve Site, and Columbia Furnace Valve Site in Loudoun, Warren, and Shenandoah Counties, Virginia; and the Moorefield Valve Site, Whitmer Valve Site, Mill Creek Valve Site, and Cleveland Compressor Station in Hardy, Randolph, and Upshur Counties, West Virginia.

¹² *Supra* note 11.

¹³ Application at 14.

day of firm transportation service created by the project.¹⁴ Columbia held a reverse open season, but received no offers from existing shippers to turn back capacity.¹⁵

10. Columbia estimates the total cost of the WB XPress Project to be \$780 million. Columbia proposes to charge an incremental recourse reservation rate and its currently applicable commodity rate under Rate Schedule FTS as the initial rates for firm transportation service using the expansion capacity created by the project.

II. Procedural Matters

A. Notice, Interventions, Protests, and Comments

11. Notice of Columbia's application was published in the *Federal Register* on January 21, 2016,¹⁶ setting February 4, 2016 as the deadline for filing motions to intervene and comments. Timely, unopposed motions to intervene are granted by operation of Rule 214(c) of the Commission's Rules of Practice and Procedure.¹⁷ Donnell R. Fullerton, Piedmont Natural Gas Company, Inc., and, jointly, the Cities of Charlottesville and Richmond, Virginia, filed late motions to intervene, which the Commission granted.¹⁸ All intervenors are listed in Appendix A.

12. In their February 4, 2016 motion to intervene, Appalachian Mountain Advocates, Appalachian Voices, Chesapeake Climate Action Network, and the Virginia and West Virginia chapters of Sierra Club (collectively, Appalachian Group) protest Columbia's project, alleging that the project is not needed and raising several environmental concerns. On February 10, 2016, the Virginia and West Virginia chapters of the Sierra Club (Sierra Club) filed comments that identified specific environmental issues to be evaluated in the Environmental Assessment (EA) and urged preparation of a programmatic Environmental Impact Statement (EIS) to evaluate the WB XPress Project in conjunction with three other potential pipeline projects: the Atlantic Coast Pipeline in Docket No. CP15-554-000, the Mountain Valley Pipeline in Docket No. CP16-10-000,

¹⁴ In its application, Columbia requested that the precedent agreements be treated as privileged material pursuant to 18 C.F.R. § 388.112 (2017), and that the identities of the shippers not be disclosed.

¹⁵ Application at 14-15.

¹⁶ 81 Fed. Reg. 3404.

¹⁷ 18 C.F.R. § 385.214(c) (2017).

¹⁸ Secretary's November 15, 2016 Notice Granting Late Interventions.

and the Appalachian Connector Project.¹⁹ The Virginia chapter of the Sierra Club also filed comments regarding greenhouse gas (GHG) emissions associated with four interstate pipelines in Virginia,²⁰ and recommended that Commission staff analyze cultural attachment during the environmental review process.²¹ On February 25, 2016, Columbia filed an answer to Sierra Club's filings.

13. In their February 4, 2016 motion to intervene, Shenandoah Valley Network, Highlanders for Responsible Development, Inc., Virginia Wilderness Committee, Shenandoah Valley Battlefields Foundation, and Natural Resources Defense Council (collectively, Shenandoah Group) also question the need for the WB XPress Project and recommend a region-wide environmental review to evaluate the four planned pipeline projects in central Appalachia (i.e., WB XPress, Atlantic Coast Pipeline, Mountain Valley Pipeline, and Appalachian Connector projects).

14. All comments are addressed in the EA and the environmental analysis section of this order.

B. Request for Hearing

15. The Shenandoah Group requests a formal hearing.²² The Commission has broad discretion to structure its proceedings so as to resolve a controversy in the best way it

¹⁹ To date, no application or pre-filing request has been filed with the Commission for the Appalachian Connector Project.

²⁰ Sierra Club's filing includes a white paper addressing methods for analyzing potential GHG emission associated with four proposed pipelines in Virginia. Notwithstanding a brief reference to the WB XPress Project in the introduction, the scope of the white paper is confined to a discussion of GHG emission estimates for the Atlantic Coast Pipeline and the Mountain Valley Pipeline.

²¹ Sierra Club defines cultural attachment as "the cumulative effect over time of a collection of traditions, attitudes, practices, and stories that ties a person to the land, to physical place, and to kinship patterns." Sierra Club's (Virginia chapter) February 10, 2016 filing. While Sierra Club's cultural attachment filing specifically identifies the Atlantic Coast Pipeline and the Mountain Valley Pipeline projects, the WB XPress Project is not mentioned.

²² Shenandoah Group's February 4, 2016 Motion at 1.

sees fit.²³ An evidentiary, trial-type hearing is necessary only where there are material issues of fact in dispute that cannot be resolved on the basis of the written record.²⁴ The Shenandoah Group raises no material issue of fact that the Commission cannot resolve on the basis of the written record. Accordingly, the Commission denies the request for a formal hearing.

III. Discussion

16. Since 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

A. Certificate Policy Statement

17. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new pipeline construction.²⁶ The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new 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.

18. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without

²³ See *Stowers Oil and Gas Co.*, 27 FERC ¶ 61,001 (1984) (Commission has discretion to manage its own procedures); *PJM Transmission Owners*, 120 FERC ¶ 61,013 (2007).

²⁴ See, e.g., *Dominion Transmission, Inc.*, 141 FERC ¶ 61,183, at P 15 (2012); *Southern Union Gas Co., v. FERC*, 840 F.2d 964, 970 (D.C. Cir. 1988).

²⁵ 15 U.S.C. § 717f (2012).

²⁶ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (*Certificate Policy Statement*).

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, identify any adverse impacts the applicant's proposal might have on other existing pipelines in the market and their captive customers, and consider whether the applicant's proposal would result in the unnecessary exercise of eminent domain or have other adverse economic impacts on landowners and communities affected by the route of the new facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to consider the environmental analysis, where other interests are addressed.

19. As discussed above, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The Commission has determined that, in general, where a pipeline proposes to charge incremental reservation rates for new construction that are higher than the applicable existing system rate, as is the case here, the pipeline satisfies the threshold requirement that the project will not be subsidized by existing shippers.²⁷ As discussed below, we are approving Columbia's proposed incremental recourse rate for services utilizing the capacity created by the WB XPress Project. The incremental recourse rate is designed to recover the cost of service associated with the construction and operation of the WB XPress Project and is higher than Columbia's existing system rate. Therefore, we find that Columbia's existing customers will not subsidize the project, and the threshold requirement of no subsidization is met.²⁸

20. We also find that the proposal will not degrade service to Columbia's existing customers. While the purpose of the proposed project is create capacity to be used for incremental transportation service, Columbia states that by providing additional

²⁷ See, e.g., *Dominion Carolina Gas Transmission, LLC*, 155 FERC ¶ 61,231, at P 15 (2016), and *Transcontinental Gas Pipe Line Corp.*, 98 FERC ¶ 61,155, at 61,552 (2002).

²⁸ In addition, as discussed below, since an incremental commodity charge calculated to recover variable project costs would be less than Columbia's generally applicable base commodity charge, we are approving, consistent with our policy, Columbia's proposal to utilize its generally applicable commodity charge as the recourse commodity charge for project service.

bidirectional capacity and restoring the MAOP on Line WB and Line VB, the WB Xpress Project will also enhance the reliability and flexibility of Columbia's system. Increased system flexibility will further enhance the ability of existing customers to access new markets and sources of gas. In addition, there will be no adverse impact on other pipelines in the region or their captive customers because the proposal is not intended to replace service on other pipelines. Columbia states that the project capacity will provide transportation service for new gas supply serving new loads. Furthermore, no pipeline company has protested Columbia's application.

21. We are further satisfied that Columbia has taken steps to minimize any adverse impacts on landowners and communities that might be affected by the project. Columbia states that a majority of the 26.2 miles of replacement pipeline will parallel existing Columbia-owned pipelines and will be within or adjacent to existing Columbia rights-of-way. The entire 3.1 miles of new pipeline will be within or adjacent to other utility corridors. The new Elk River Compressor Station would be constructed adjacent to an existing compressor station on Columbia-owned land within an existing industrial site, while the new Chantilly Compressor Station would be constructed adjacent to an existing utility corridor. With respect to the proposed modifications to existing aboveground facilities, Columbia indicates that the modifications to the seven existing compressor stations and two existing meter and regulator stations would occur within the fenced boundaries of the existing facilities, except for temporary workspace required for construction activities.²⁹ Accordingly, for purposes of our consideration under the Certificate Policy Statement, we find that Columbia has taken steps to minimize any adverse impacts on landowners and surrounding communities.

22. Sierra Club and the Virginia Run Community Association (Virginia Run) challenge the need for the proposed WB XPress Project. Sierra Club raises a variety of arguments including: (i) all natural gas pipeline infrastructure projects proposed in central Appalachia should be considered to address the regional purpose and need of the project; (ii) the availability of alternatives – renewable energy and under-utilized pipeline capacity – to meet future demand; and (iii) the insufficient production growth in the Marcellus shale.³⁰ Virginia Run questions whether domestic need justifies another natural gas pipeline in the region and speculates that the project is simply a connector line that will facilitate access to other transmission lines that ultimately transport natural gas

²⁹ Columbia reports that 38.1 acres of land will be affected temporarily during construction at the existing compressor stations, meter station, and regulator station. An additional 4.7 acres of land will be affected temporarily during construction at the existing valve sites and receiver site. Application, Resource Report 1 at 1-14 to 1-16.

³⁰ On February 10, 2016, Appalachian Mountain Advocates filed comments on Sierra Club's behalf.

for export overseas. The Appalachian Group and the Shenandoah Group also question the need for the project in their respective interventions.

23. We disagree with Sierra Club's assertion that the Commission must address a regional purpose and need by evaluating the WB XPress Project in conjunction with all other natural gas pipeline infrastructure projects proposed in central Appalachia. In effect, Sierra Club argues that the Commission should analyze broad economic need across the central Appalachian region, and should consider the way that alternative natural gas projects, other energy sources, or energy conservation could potentially satisfy that broad economic need. Though the NGA's public convenience and necessity standard is broad, the Commission's authority under section 7 is limited. The Commission can issue a certificate for a proposed project subject to "such reasonable terms and conditions as the public convenience and necessity may require," but the Commission cannot order, for example, that a natural gas company carry gas from or to Commission-favored producers or users. Similarly, the Commission can decline to authorize a proposed project if a balance of all the circumstances weighs against certification.³¹

24. With respect to the project alternatives raised by Sierra Club, our environmental review considered the potential for energy conservation and renewable energy sources, and the availability of capacity on other pipelines, to serve as alternatives to the WB XPress Project and concluded that they do not presently serve as practical alternatives to the project.³² Moreover, the argument that other proposed pipelines could serve as alternatives is particularly unavailing when applied to a project like the WB XPress Project that proposes to use primarily lift-and-lay replacement of portions of an existing pipeline system within existing right-of-ways and utility corridors. For these reasons, we are not persuaded that authorization of the WB XPress Project would lead to the overbuilding of pipeline infrastructure.

25. Sierra Club's assertion that there is insufficient production growth in the Marcellus is also unpersuasive. Sierra Club relies on general projections regarding Marcellus shale production to argue that gas production is declining due to an oversupply

³¹ *E.g.*, *Fed. Power Comm'n v. Transcontinental Gas Pipe Line Corp.*, 365 U.S. 1, 17 (1961); *Jordan Cove Energy Project, L.P.*, 154 FERC ¶ 61,190, at PP 28-42 (2016).

³² EA at 278-280 (concluding that existing pipelines either do not have the capacity to transport the required volumes of gas, or would require additional construction resulting in significantly more environmental impacts than the proposed project) and 278 (concluding that renewable energy sources or the use of energy conservation measures are not reasonable transportation alternatives and cannot function as a substitute for the WB XPress Project).

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of natural gas and falling prices.³³ While undercutting Sierra Club's argument that the project will induce upstream natural gas development,³⁴ this vague, unsupported assertion does not negate the fact that Columbia has long-term contracts with a local distribution company and two producers for the full transportation capacity that would be created by the WB XPress project.

26. Lastly, we are not persuaded by the Appalachian Group's, the Shenandoah Group's, and Virginia Run's general arguments regarding project need. Specifically, Virginia Run argues that Columbia's project is not needed based on speculation that the expansion capacity will be used to transport gas for export. However, there is no evidence in the record that the expansion capacity will be used to transport natural gas for export. One of the project shippers is a local distribution company that will locally distribute its gas or use it to generate electricity, while the other two project shippers are producers. Further, even if there was evidence that some of the gas would be exported, the Commission has explained that the Secretary of Energy, not this Commission, acts on applications for authorization to export or import gas.³⁵

27. Columbia has executed precedent agreements with three shippers for 15- and 20-year firm transportation service agreements for 100 percent of the firm transportation service that will be created by the WB XPress Project. Long-term commitments serve as "significant evidence of demand for the project."³⁶ Moreover, Ordering Paragraph (C) of this order requires that Columbia file a written statement affirming that it has executed

³³ Sierra Club's February 10, 2016 Comments at 28-29 (filed by Appalachian Mountain Advocates on behalf of the Virginia and West Virginia Chapters of the Sierra Club).

³⁴ *See id.* at 22.

³⁵ *See, e.g., Magnolia LNG, LLC*, 155 FERC ¶ 61,033, at P 21 (2016). *See also Sierra Club v. FERC*, 827 F.3d 36, 47 (D.C. Cir. 2016) (finding that the Commission's environmental analysis did not need to address the indirect effects of the anticipated export of natural gas because "the Department of Energy, not the Commission, has sole authority to license the export of any natural gas going through the [LNG export terminal].").

³⁶ Certificate Policy Statement, 88 FERC ¶ 61,227 at 61,748, *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094. *See also Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1311 (D.C. Cir. 2015) (rejecting argument that precedent agreements are inadequate to demonstrate market need); *Minisink Residents for Env'tl. Pres. and Safety v. FERC*, 762 F.3d 97, 112 n.10 (D.C. Cir. 2014) (same).

final contracts for service at the levels provided for in the precedent agreements prior to commencing construction. Therefore, we conclude that Columbia's signed precedent agreements demonstrate need for the proposed project.

28. Based on the benefits that the WB XPress Project will provide by making available an additional 1.3 MMDth per day of bi-directional firm transportation service to markets in western West Virginia and northern Virginia, and the minimal adverse impacts on existing shippers, other pipelines and their customers, and landowners and surrounding communities, we find that the proposed project is consistent with the Certificate Policy Statement. Based on this finding and the environmental review, as discussed below, we further find that the public convenience and necessity require approval and certification of Columbia's proposal under section 7 of the NGA, subject to the environmental and other conditions discussed in this order.

B. Rates

29. Columbia proposes an initial incremental monthly firm recourse reservation charge of \$7.660 per Dth for firm transportation service for shippers using WB XPress Project capacity. Columbia also proposes to use its applicable maximum existing system charges for all surcharges and commodity rates as set forth in Columbia's tariff, excluding the Capital Cost Recovery Mechanism surcharge.³⁷ Columbia states shippers subscribing for service under the incremental recourse rate will also provide all maximum annual retainage surcharges, as set forth in its tariff.

30. Columbia states it will provide project service at negotiated rates in accordance with the negotiated rate authority in section 46 of the General Terms and Conditions of its tariff. Columbia states it will file the negotiated rate agreements with the Commission 30 to 60 days prior to when the underlying negotiated rates are proposed to become effective.³⁸

31. In support of its proposal, Columbia shows in Exhibit N, pages 1 and 2 of the application, an annual project cost of service for year one of \$123,768,970. This cost of

³⁷ The Capital Cost Recovery Mechanism surcharge allows Columbia to recover revenue requirements associated with its Modernization Settlement Agreement, which the Commission approved in Docket No. RP12-1021-000. *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062 (2013).

³⁸ Pipelines are required to file any service agreement containing non-conforming provisions and to disclose and identify any transportation term or agreement in a precedent agreement that survives the execution of the service agreement. 18 C.F.R. § 154.112(b) (2017).

service is based on the estimated cost of \$780 million for the facilities associated with the project. Columbia uses a depreciation rate of 1.5 percent per its settlement approved in Docket No. RP12-1021-000,³⁹ and a pre-tax rate of return that was approved in Docket No. RP95-408-000.⁴⁰

32. The Commission has reviewed Columbia's incremental cost of service and proposed rates and finds that they are reasonable. Because the proposed incremental monthly reservation charge of \$7.660 per Dth is higher than the generally applicable Rate Schedule FTS reservation charge of \$4.771 per Dth,⁴¹ the existing customers will not subsidize the WB XPress Project.

33. Furthermore, Columbia proposes to charge its generally applicable base commodity charge. The Commission accepts Columbia's proposed reservation and commodity charges and directs Columbia to file tariff records that are consistent with the *pro forma* tariff records contained in Columbia's filing between 30 and 60 days prior to the date the project facilities go into service.

34. Consistent with Commission policy, Columbia is required to charge its currently effective interruptible transportation service rate for interruptible service made available by the capacity added by an expansion project.⁴²

1. Request for a Pre-determination for Rolled-in Rate Treatment

35. Columbia requests a pre-determination of rolled-in rate treatment for the costs and billing determinants associated with the Retainage Adjustment Mechanism (RAM), Electric Power Cost Adjustment (EPCA), Transportation Cost Rate Adjustment (TCRA), and Operational Transaction Rate Adjustment (OTRA) surcharges associated with the WB XPress Project. Columbia states, as shown in Exhibit Z-1, the increase in billing determinants associated with the WB XPress Project are expected to cause a decrease in the RAM and EPCA surcharges.⁴³ Columbia claims existing shippers will not subsidize

³⁹ *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062.

⁴⁰ *Columbia Gas Transmission Corp.*, 79 FERC ¶ 61,044 (1997).

⁴¹ *Columbia Gas Transmission, LLC*, FERC NGA Gas Tariff, Baseline Tariffs, Currently Effective Rates, FTS Rates, 38.0.0.

⁴² *See, e.g., Texas Eastern Transmission, LP*, 139 FERC ¶ 61,138, at P 31 (2012) and *Gulf South Pipeline Co., LP*, 130 FERC ¶ 61,015, at P 23 (2010).

⁴³ For example, RAM will decrease from 1.885% to 1.664%, as set forth in Exhibit Z-1, page 2.

compression costs associated with the WB XPress Project and therefore its proposal to charge the WB XPress Project shippers the generally applicable RAM and EPCA charges are appropriate and consistent with Commission policy.

36. Moreover, Columbia proposes to assess the WB XPress Project shippers its generally applicable TCRA (to recover Account 858 expenses) and OTRA (to recover operational purchases and sales) surcharges. Columbia contends that the increased billing determinants associated with the WB XPress Project will decrease both the TCRA and OTRA surcharges for all system shippers. In addition, Columbia states the project will not increase the costs recovered by Columbia through either the TCRA or OTRA surcharges.

37. Columbia has adequately demonstrated that rolling in the cost and billing determinants of the RAM, EPCA, TCRA, and OTRA surcharges associated with the WB XPress Project will result in a decrease in these surcharges for existing customers. Therefore, absent a significant change in circumstances, we will grant Columbia's request for a pre-determination of rolled-in rate treatment for the RAM, EPCA, TCRA, and OTRA surcharges in a general NGA Section 4 rate proceeding or a limited Section 4 proceeding, such as Columbia's annual RAM filing.

2. Reporting Incremental Costs

38. Consistent with the Certificate Policy Statement, the Commission directs Columbia to keep separate books and accounting of these costs. The books should be maintained with applicable cross-references, as required by section 154.309 of the Commission's regulations.⁴⁴ This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA Section 4 or 5 rate case and the information must be provided consistent with Order No. 710.⁴⁵

C. Environmental Analysis

39. On April 16, 2015, Commission staff began its environmental review of the WB XPress Project by granting Columbia's request to use the pre-filing process and assigning Docket No. PF15-21-000. As part of the pre-filing review, staff participated in open houses sponsored by Columbia in Elkview, Elkins, and Cabins, West Virginia and Centreville, Virginia on June 16, 17, 18, and 24, 2015, respectively, to explain the environmental review process to interested stakeholders.

⁴⁴ 18 C.F.R. § 154.309 (2017).

⁴⁵ *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, *FERC Stats. & Regs.* ¶ 31,267, at P 23 (2008).

40. On July 22, 2015, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the planned WB XPress Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meeting* (NOI). The NOI was published in the *Federal Register* on July 29, 2015,⁴⁶ and mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners. We received comments in response to the NOI from eight landowners, two federal agencies, five state agencies, six local agencies, two congressional representatives, three non-governmental organizations, and 23 interested parties.⁴⁷

41. On August 12, 2015, Commission staff conducted a public scoping meeting in Centreville, Virginia, to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the EA. In total, three individuals provided verbal comments at the Commission's scoping meeting. A transcript of the scoping meeting was entered into the public record in Docket No. PF15-21-000.

42. The primary issues raised during the scoping process included the need for the project; impacts on soils, karst geology, groundwater, waterbodies, wetlands, sensitive and listed species, forests, sensitive National Forest System lands, air quality, safety, and climate change; alternatives; cumulative and indirect impacts; and the need for a programmatic EIS.

43. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), Commission staff prepared an EA for Columbia's proposal. The EA was prepared with the cooperation of the U.S. Forest Service (Forest Service), U.S. Army Corps of Engineers (Corps), U.S. Fish and Wildlife Service (FWS), West Virginia Department of Environmental Protection, and West Virginia Division of Natural Resources. The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, socioeconomics, cumulative impacts, and alternatives. All substantive comments received in response to the NOI and raised during the scoping process were addressed in the EA.

44. The EA was issued for a 30-day comment period and placed into the public record on March 24, 2017. The Commission received comments on the EA from the U.S. Environmental Protection Agency Region III Office (EPA), the Monongahela National

⁴⁶ 80 Fed. Reg. 45,210.

⁴⁷ Multiple parties filed more than one letter.

Forest of the Forest Service, Virginia Department of Environmental Quality (Virginia DEQ), Columbia, and two affected landowners. We address their comments below.

1. Soils

45. During project construction, topsoil and subsoil could be disturbed resulting in a loss of soil fertility. As concluded in the EA, to avoid the mixing of topsoil and subsoil, topsoil segregation would be performed to ensure post-construction vegetation success.⁴⁸ The Forest Service concurs with the EA's assessment that topsoil conservation on National Forest System lands is feasible only over the trench area, given the limitations for stockpiling, presence of trees in the existing right-of-way, and safety concerns related to working over an operational pipeline and working on steep slopes.⁴⁹

46. Revegetation of disturbed soils depends on soil fertility. The EA noted that Columbia's Order 1 Soil Survey (conducted along the portion of the project that crosses Monongahela National Forest lands) indicated that the existing soil fertility is at an acceptable level overall, with the exception of calcium and phosphorous.⁵⁰ Citing the EA's reference to applying dolomitic limestone at the general rate of 4,000 pounds per acre to lower calcium levels,⁵¹ the Forest Service states that on Monongahela National Forest lands, the actual application rate should be determined by consulting the Order 1 Soil Survey soil chemistry data particular to each specific soil map unit. We agree. Therefore, the application rate should be determined during Columbia's consultation with the Forest Service and contained as a minimization measure in the Special Use Permit application for construction on National Forest System lands. To confirm Columbia has met the needs of the Forest Service, Environmental Condition 18 requires Columbia to file the final Special Use Permit for construction on National Forest System lands with the Secretary prior to construction.

47. The Virginia DEQ comments that it will require Columbia to file general erosion and sediment control standards and specifications on an annual basis for the project, site-specific erosion and sedimentation control plans for construction of the project (final development of which is still in progress),⁵² site-specific stormwater management plans

⁴⁸ EA 73-74.

⁴⁹ EA at 74.

⁵⁰ EA at 83.

⁵¹ *Id.*

⁵² EA at 28

(incorporated into Columbia's Environmental Construction Standards),⁵³ and to promptly revegetate cleared lands (also described in Columbia's Environmental Construction Standards).⁵⁴

48. The Virginia DEQ also comments on the assertion in the EA that the potential for encountering contaminated soils within or near the project work limits is low. Virginia DEQ recommends that Columbia implement pollution prevention principles, including reduction, reuse, and recycling of all solid wastes. Table B.1.2-2 in the EA identifies hazardous and contaminated sites identified near the project. Of the 16 Resource Conservation and Recovery Act (RCRA) sites within 1,000 feet of the project, seven of the sites are at or near existing Columbia compressor stations, while the remaining sites are associated with access roads or contractor yards. The EA concludes that based on the scope of work at the proposed project facility sites and the distance between most of the proposed work and the contaminated sites, the potential to encounter contaminated soils during project construction and operation is low.⁵⁵ Virginia DEQ's Division of Land Protection and Revitalization reviewed the EA's soil contamination and hazardous waste sections and did not have any additional comments. Columbia's Environmental Construction Standards for Virginia address solid waste in section VI.C., which indicates that Columbia's environmental inspector will verify that the locations for any disposal of excess construction materials for beneficial reuse complies with applicable laws and regulations.⁵⁶ Therefore, impacts from solid waste will be minimized.

49. The EA states that Columbia will use equipment to prepare the final seedbed in a manner that creates beneficial pockets or scarifications, and also avoids compaction, during final grading of sections of pipeline right-of-way on National Forest System lands that have relatively smooth post-construction areas.⁵⁷ During final grading, the Forest Service recommends that no equipment be brought onto the right-of-way to track or scarify the final top layer of soil and that soil is left in place to be the seedbed, prior to seeding. Columbia states that it plans to leave the topsoil layer in its roughened, un-compacted state pursuant to Forest Service requirements.⁵⁸ Columbia also states that

⁵³ EA at 33.

⁵⁴ EA at 82.

⁵⁵ EA at 85.

⁵⁶ Application, Appendix 1E.

⁵⁷ EA at 84.

⁵⁸ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 3.

it will develop a method in consultation with the Forest Service that includes the final placement of soil onto National Forest System lands during final grading, and this method will be contained as a minimization measure in the Special Use Permit application for construction.

50. The EPA recommends that Columbia notify underground storage tank owners when major earth disturbances will occur and follow Columbia's Spill Prevention, Containment, and Control Plan for hazardous materials and underground storage tanks. As stated in the EA, based on the scope of work at the proposed project facility sites and the distance of most of the proposed work from the potentially contaminated sites, the potential to encounter contaminated soils during construction and/or operation of the project is low.⁵⁹ Furthermore, Columbia will discuss the location of any underground storage tanks in its easement negotiations with landowners. Accordingly, we conclude that underground storage tank owners along the construction work corridor would be properly notified when major earth disturbances will occur.

2. Geology

51. As explained in the EA, portions of the project area within the Monongahela National Forest were classified highly susceptible to landslide hazards.⁶⁰ The EPA recommends that Columbia develop, prior to construction, a site-specific work plan that outlines efforts to reduce risk of landslides, controls erosion on steep slopes, and minimizes risk of sediment contribution to aquatic resources. Additionally, EPA recommends Columbia provide training to field personnel working in areas of landslide hazard. As stated in the EA, Columbia will design a site-specific work plan that will address landslides, steep slopes, and erosion prior to construction as noted in its Environmental Construction Standards.⁶¹ Columbia will also train all field personnel with regard to environmental conditions.⁶² Furthermore, Columbia will implement its Slip Prevention Control Procedures to minimize landslide risk.⁶³ For these reasons, we agree with the EA's conclusion that risks of erosion, landslides, and sediment

⁵⁹ EA at 85.

⁶⁰ EA at 54.

⁶¹ Columbia's February 1, 2016 Supplemental Filing, Appendix C - Environmental Construction Standards at 1.

⁶² *Id.* at 34

⁶³ EA at 63.

contribution to aquatic resources will be sufficiently minimized. Additional conditions are not necessary.

52. The EPA states that the recommendations in the Landslide Hazard Assessment Report should be made conditions of Columbia's Certificate. The Landslide Hazard Assessment Report⁶⁴ was prepared for the 11.4 miles of project pipeline that would cross Monongahela National Forest lands. While potential landslide hazards are present outside the Monongahela National Forest property, it would not be appropriate to condition the entire project based on an analysis that focused solely on the portion of the project that would cross Monongahela National Forest lands. Columbia will construct the project in accordance with its Environmental Construction Standards⁶⁵ and Geohazard Investigation,⁶⁶ which provide several measures, such as adjusting the spacing of interceptor diversion structures or using jute netting, which will minimize the risk of landslide hazards upon implementation. Furthermore, Environmental Condition 1 requires Columbia to follow all construction procedures and mitigation measures described in its application and supplements (e.g., Columbia's Environmental Construction Standards and Geohazard Investigation) and identified in the EA. Therefore, we agree with the finding in the EA that landslide hazards will be sufficiently minimized and we do not find it necessary to require additional project-wide recommendations derived from the Landslide Hazard Assessment Report.

53. The EPA states that blasting can directly affect geology and indirectly affect hydrology, wildlife, aquatic species, wells, and underground storage tanks. Noting that West Virginia does not currently have non-mine blasting regulations, the EPA also suggests that the Commission consider additional guidance in West Virginia. Columbia has provided a project-specific blasting plan. In addition, Columbia's contractors will provide site-specific blasting plans prior to construction.⁶⁷ Notwithstanding that there are no regulations for non-mine blasting in West Virginia,⁶⁸ Columbia's blasting plan outlines the procedures and safety measures it will require its contractors to follow when conducting blasting activities in West Virginia.⁶⁹ Columbia's blasting procedures, which

⁶⁴ Columbia's February 1, 2016 Supplemental Filing, Attachment I.

⁶⁵ *Id.* at Appendix C.

⁶⁶ Application, Appendix 6D.

⁶⁷ EA at 38.

⁶⁸ Columbia's January 27, 2017 Supplemental Filing, Blasting Plan, at 4.

⁶⁹ *Id.* at 2-11.

are intended to be consistent with minimum safety requirements as defined by federal, state, and local regulations, include requirements for obtaining, storing, transporting, handling, loading, detonating, and disposing of blasting materials, in addition to monitoring and reporting blasting events. Columbia states that the blasting plan also addresses previous comments and concerns of the Monongahela National Forest, FWS, and West Virginia Department of Natural Resources.⁷⁰ Therefore, we find that the EA properly concludes that these measures will sufficiently protect downstream resources, utilities, wells, persons, and property during blasting operations.⁷¹

54. The EA reported that a review of federal, state, and commonwealth databases identified 34 contaminated sites within one mile of the project facilities.⁷² The EPA recommends that monitoring and contingencies be developed and shared with equipment operators, on-site personnel, and environmental inspectors for the RCRA sites identified within 1,000 feet of the project area. In response, Columbia states that of the 16 RCRA sites identified within 1,000 feet of the project, seven sites are at or near existing Columbia compressor stations, while the remaining sites are associated with access roads or contractor yards.⁷³ No blasting is anticipated for these access roads or contractor yards, and no blasting is proposed within 1,000 feet of any compressor station where work will be conducted within 1,000 feet of a RCRA site, except, potentially, the Strasburg Compressor Station. The Strasburg Compressor Station is regulated under RCRA as a small quantity waste producer. Environmental Condition 12 requires Columbia to develop and implement a blasting plan for Virginia that will include mitigation measures to minimize impacts. Furthermore, measures outlined in Columbia's Environmental Construction Standards will be implemented to reduce potential impacts from spills of hazardous materials. These measures include regularly inspecting equipment, properly training employees, and promptly containing, cleaning up, and reporting spills.

55. EPA also recommends that Columbia identify potential acid-producing rock and prepare avoidance or contingency plans. Commission staff has not identified any acid-producing rock in the project area, therefore, impacts are not anticipated. Columbia states that it intends to treat acidic topsoils with liming applications to raise the pH level of the soil in most areas of construction disturbance (excluding the Cheat Mountain

⁷⁰ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 2.

⁷¹ EA at 63.

⁷² EA at 85.

⁷³ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 2.

Salamander habitat).⁷⁴ We are satisfied that the measures presented in the EA and described above will minimize rock and soil impacts related to the proposed project.⁷⁵

56. The EA reported that segments of the proposed project in West Virginia and Virginia would cross areas with the potential to contain karst features.⁷⁶ Karst features are topographic features that are formed by the dissolving of bedrock by surface water or groundwater (e.g., sinkholes, closed depressions, sinking streams, and near-surface subterranean drainages and caves/caverns).⁷⁷ The EPA concurs with the recommendations in Columbia's Karst Supplemental Report regarding sinkholes identified near milepost 14.1. EPA recommends that Columbia eliminate the extra workspace and narrow the right-of-way in this area, and ensure proper erosion and sediment control near the spring pond and closed depression. Columbia has eliminated the extra workspace closest to the karst feature on the south side of the right-of-way near MP 14.1 and replaced it with a workspace on the north side of the right-of-way to mitigate impacts.⁷⁸ Appropriate erosion and sediment control will be incorporated as described in the Karst Mitigation Plan,⁷⁹ and Columbia's Environmental Construction Standards. Therefore, we agree with the EA's conclusion that the project will not result in significant impacts on groundwater.⁸⁰

57. The Virginia DEQ comments that the Virginia Division of Conservation and Recreation (Virginia DCR) does not anticipate adverse impacts on karst features as a result of construction of the five sites in Shenandoah and Warren Counties (i.e., Dysart Valve Site, Columbia Furnace Site, Strasburg Compressor Station, Shenandoah River West Valve Site, and Ninevah Meter Station). However, it recommends that Columbia contact Virginia DCR to document and minimize adverse impacts if karst features/terrain are encountered during project construction in Virginia. If karst openings need to be filled, the Virginia DCR directs Columbia to the karst assessment guidelines on the Virginia DCR's website. In the unlikely event karst features are encountered during

⁷⁴ *Id.*

⁷⁵ EA at 87.

⁷⁶ EA at 60.

⁷⁷ *Id.*

⁷⁸ EA at 66.

⁷⁹ Columbia's May 4, 2016 Data Request Response.

⁸⁰ EA at 94.

construction, Columbia will coordinate with Virginia DEQ and Virginia DCR during construction compliance reporting on necessary minimization measures, per the Virginia DEQ's recommendations.

3. Water Resources

58. As explained in the EA, pipeline construction could affect surface waters in a variety of ways (e.g., by modifying the existing habitat, increasing rate of sediment loading, increasing turbidity levels, reducing dissolved oxygen concentrations, and introducing chemical discharges).⁸¹ Virginia DEQ recommends that Columbia avoid and minimize impacts on surface waters to the extent practical, contact the Corps for wetland impacts, and use best management practices. We agree with Virginia DEQ's recommendations. Columbia will minimize impacts on waterbodies by using dry crossing methods unless project construction conditions involve crossing ephemeral waterbodies with no perceivable flow.⁸² Columbia has filed applications with the Huntington, Pittsburgh, and Norfolk Corps Districts for permits under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.⁸³ Columbia states that while the project will require 0.05 acre of wetland conversion in the Pittsburgh Corps District and 0.1 acre of wetland fill/conversion in the Norfolk Corps District, compensation is not necessary for these impacts.⁸⁴ Columbia will also minimize impacts on wetlands and waterbodies by following the Commission's *Wetland and Waterbody Construction and Mitigation Procedures* (Wetland and Waterbody Procedures) and Columbia's Environmental Construction Standards and Spill Prevention, Containment, and Control Plan.

59. Virginia DEQ also states that the project must comply with the Virginia Water Protection program. Columbia has applied for a Virginia Water Protection permit.⁸⁵ In addition, Columbia indicated that it is exempt from the general permit for hydrostatic

⁸¹ EA at 100.

⁸² *Id.*

⁸³ EA at 48.

⁸⁴ *See* Columbia's April 24, 2017 Comments on EA, Attachment 1 at 2.

⁸⁵ EA at 49.

tests.⁸⁶ In any event, as stated in the EA, Columbia must adhere to all applicable federal, state, and local permitting requirements.⁸⁷

60. Virginia DEQ requests that Columbia consider utilizing permeable pavement where paving is needed, and that denuded areas be promptly revegetated following construction. Columbia states that it will construct parking areas and walkways using gravel, which is a permeable material. Columbia will also ensure that temporary access roads are left in their pre-construction condition or in conformity with landowner agreements.⁸⁸ The Commission's Wetland and Waterbody Procedures require that all disturbed wetland areas be successfully revegetated with wetland herbaceous and/or woody plant species.⁸⁹

61. If spoil piles need to be stored within stream buffers for larger streams or streams in which blasting or rock excavation occur, and construction lasts five or more days, the EPA recommends that Columbia maintain a minimum of 20 feet from the stream bank and protect the spoil piles with silt fencing until the crossing is complete. The Commission's Wetland and Waterbody Procedures require spoil from minor and intermediate waterbody crossings (i.e., 100 feet wide or less), and upland spoil from major waterbody crossings (i.e., greater than 100 feet) be placed in the construction right-of-way at least 10 feet from the water's edge or in additional work areas, which are required to be at least 50 feet from the water's edge. We conclude that these requirements will minimize the likelihood of sediment reaching the waterbody. However, we note that the project must be constructed in compliance with Sections 401 and 404 of the Clean Water Act, which may contain additional setback requirements.

62. The EPA concurs with the EA's Environmental Condition 14, which recommends that Columbia offer pre- and post- construction monitoring of well yield and water quality for wells within 150 feet of construction workspaces. The EPA adds that this distance should be extended to 500 feet within karst terrain. The EPA also suggests that for wells and springs within 500 feet of identified contaminated soil or groundwater sites, Columbia should complete pre- and post- construction water quality tests, with landowner permission, and analyze for contaminants of concern from the potential source.

⁸⁶ *Id.*

⁸⁷ EA at 104.

⁸⁸ EA at 177.

⁸⁹ FERC's Wetland and Waterbody Procedures, Section VI.C.7.

63. Although Columbia's Environmental Construction Standards will minimize impacts on groundwater resources, karst terrain adds unpredictable changes to water pathways. Therefore, to further protect groundwater in karst terrain, we have modified Environmental Condition 14 to require Columbia to conduct pre- and post- construction monitoring of well yield and water quality in karst terrain for wells within 500 feet of construction workspaces. However, we do not conclude that testing of wells and springs within 500 feet of identified contaminated soil or groundwater sites is necessary given the scope of work and the distance between the contaminated sites and the construction activities. Furthermore, implementation of the measures in Columbia's Environmental Construction Standards will minimize potential impacts from contaminated soil. As stated in the EA, Columbia will contact Virginia DEQ, West Virginia Department of Environmental Protection, and other local agencies as appropriate, to develop and implement mitigation measures and procedures to address contaminated soils.⁹⁰ Therefore, we agree with the EA's conclusion that given Columbia's impact minimization and mitigation measures for contaminated soils, soil resources would not be significantly affected by project construction and operation.⁹¹

64. Ms. Mullenex, the landowner at milepost 8.0 of the Line WB Replacement, comments that her spring was incorrectly labeled as a water supply well,⁹² and expresses concern for the protection of the spring throughout construction. Columbia states that it verified the spring location through site visits and will continue to work with Ms. Mullenex on her concerns through ongoing negotiations.⁹³ Also, Columbia will protect groundwater supplies by implementing measures in its blasting plan and Environmental Construction Standards, the latter of which includes Columbia's Spill Prevention, Containment, and Control Plan.⁹⁴ Furthermore, Columbia will employ five environmental inspectors to monitor compliance throughout project construction. The Commission's staff inspectors will also conduct routine inspections throughout construction, which typically continue for three years after construction or until revegetation is complete, whichever comes first.

⁹⁰ EA at 87.

⁹¹ *Id.*

⁹² EA at 91.

⁹³ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 4.

⁹⁴ EA at 91.

4. Wildlife

a. West Virginia FWS Consultation

65. On February 17, 2017, Commission staff submitted the EA to FWS's West Virginia field office (West Virginia FWS) to initiate formal consultation under the Endangered Species Act, requesting that the EA be considered the Biological Assessment. By letter dated March 21, 2017, West Virginia FWS concurred with Commission staff's determination that the project *may affect but is not likely to adversely affect* the running buffalo clover, small-whorled pogonia, Virginia big-eared bat, northern long-eared bat, and the Indiana bat. This correspondence updates the information contained in the EA.⁹⁵ West Virginia FWS also states that it has enough information to initiate formal consultation, but does not fully agree with the following conclusions in the EA, regarding the Cheat Mountain salamander:

- The implementation of conservation measures is expected to minimize the impacts on the Cheat Mountain salamander population and habitat to only those areas directly impacted by project construction;
- the summary of agency coordination regarding the occupied habitat delineation of the rock outcropping; and
- the fragmented Cheat Mountain salamander population appears to be healthy based on the number and size classes of individuals observed during presence/probable absence surveys.

66. West Virginia FWS also recommends that Columbia commit to creation of cover habitat, planting of additional red spruce and woody shrubs with shallow root systems, and post-construction surveys.

67. Columbia, in response to West Virginia FWS's comments, emphasizes its commitment to habitat enhancement and a monitoring plan for the Cheat Mountain salamander.⁹⁶ Columbia also commits to working with West Virginia FWS on a relocation plan.

68. On June 21, 2017, West Virginia FWS filed a Final Biological Opinion, which completes consultation with the agency. Therefore, the EA's recommended Environmental Condition 17 is not included in the environmental conditions in Appendix B to this order.

⁹⁵ See EA at 146, 152.

⁹⁶ Columbia's May 26, 2017 Response to EA Comments, Attachment C.

69. Columbia indicates that the EA does not note a follow-up March 7, 2016 concurrence from West Virginia FWS for mussels.⁹⁷ Consultation for mussels within lands covered by Columbia's Multi-Species Habitat Conservation Plan is complete.

b. Virginia FWS Consultation

70. On May 26, 2017, Columbia also filed the self-certification that it originally filed with FWS's Virginia field office (Virginia FWS) on January 17, 2017. Because Virginia FWS did not respond within 30 days, consultation with Virginia FWS was complete on February 16, 2017. Columbia also filed a March 10, 2017 correspondence from Virginia FWS, stating that because of the self-certification, Virginia FWS concurs with the determination of *may affect but is not likely to adversely affect* for the Virginia big-eared bat, northern long-eared bat, and the Indiana bat.

c. Aquatic Species – Monongahela National Forest

71. The Forest Service clarifies that the list of Regional Forest Service Sensitive aquatic species in the EA⁹⁸ is not exhaustive, but includes only those that could occur within the cumulative effects analysis area for the project.

72. The EA states that no known populations of eastern hellbender are located within the study area, and no known pearl dace and Cheat minnow are located in the project area.⁹⁹ However, the Forest Service points out that although these species have not been documented in the area, no surveys were conducted for these species in the area so their presence is technically unknown. We agree. Based on consultation with the Forest Service and other agencies, presence of these species is assumed where suitable habitat occurs. As stated in the EA, Columbia would implement measures that include but are not limited to project-wide erosion and sediment control measures to minimize both the risk for and the amount of sediment entering stream channels from erosion and sheet flow.¹⁰⁰ The erosion and sediment control measures would include the installation of trench breakers, slope breakers, compost filter sock, silt fence, and the use of stream buffers, where herbaceous vegetation would be left intact except for the pipeline excavation.¹⁰¹ Based on the implementation of Columbia's proposed construction

⁹⁷ See EA at 152.

⁹⁸ EA at 130.

⁹⁹ *Id.*

¹⁰⁰ EA at 131.

¹⁰¹ *Id.*

measures, impacts on these species, if present, will be minimized. These species are also addressed in the Biological Evaluation for Regional Forester's Sensitive Species, Rare, Threatened, and Endangered Species, and Birds of Conservation Concern (BE) provided as an appendix to the EA.¹⁰²

73. The Forest Service also states that although no hydrostatic testing withdrawals are proposed in the Monongahela National Forest,¹⁰³ these actions could affect aquatic resources in the Monongahela National Forest if measures are not taken to protect these resources. Where hydrostatic test water is not transported offsite, discharge from hydrostatic testing will occur in upland locations and is not expected to directly impact fisheries.¹⁰⁴ Furthermore, Columbia will control the rate of withdrawals and discharges, and implement the measures outlined in its Environmental Construction Standards, including complying with all federal and state permits.¹⁰⁵ We find that the EA adequately addresses the impacts on National Forest System lands with regard to impacts from hydrostatic testing, and agree that these impacts will be minimized. Any additional minimization measures on National Forest System lands will be determined in consultation with the Forest Service and contained as minimization measures in the Special Use Permit application for construction.¹⁰⁶

74. The Forest Service states that the EA's impact discussion for wild brook trout, a Forest Service Management Indicator Species, includes direct effects on individuals, but fails to indicate that habitat will also be removed during construction within stream channels.¹⁰⁷

75. The EA indicates that one way to minimize impacts on wild brook trout is to locate additional temporary workspace at least 50 feet back from ephemeral and small intermittent (drainage <50 acres) waterbody boundaries and at least 100 feet back from perennial and large intermittent (drainage >50 acres) waterbody boundaries. The Forest Service indicates that this is suitable for upland areas, but the Monongahela National Forest Land and Resources Management Plan requires 100 feet of riparian buffer width

¹⁰² EA, Appendix G.

¹⁰³ EA at 131.

¹⁰⁴ EA at 132-133.

¹⁰⁵ EA at 108.

¹⁰⁶ EA at 102.

¹⁰⁷ EA at 165.

at all stream channels. With the exception of those work areas noted in table B.2.3-2 of the EA,¹⁰⁸ additional temporary workspace will be a minimum of 50 feet from all waterbodies and wetlands per the Commission's Wetland and Waterbody Procedures. Columbia will also ensure that all equipment will be parked overnight and fueled at least 100 feet from waterbodies or in an upland area at least 100 feet from a wetland boundary.¹⁰⁹ Additional minimization measures on National Forest System lands will be determined in consultation with the Forest Service and incorporated into the Special Use Permit application for construction.¹¹⁰ Furthermore, all additional temporary workspace within the Monongahela National Forest will be adjusted, as necessary, so that it is located at least 100 feet away from all streams (ephemeral, intermittent, and perennial). The revised drawings will be submitted to Monongahela National Forest in the final Construction, Operation, and Management Plan for National Forest System Lands as part of Columbia's Special Use Permit for construction.¹¹¹

76. The Forest Service emphasizes that wild brook trout aquatic habitat should be restored to pre-construction conditions to the extent practicable. The EA states that Columbia will restore waterbody banks to pre-construction conditions.¹¹² Any additional requirements will be determined during Columbia's consultation with the Forest Service and contained as minimization measures in the Special Use Permit for construction.

d. State-listed Fish and Wildlife – Virginia

77. Columbia provides a communication from Virginia Department of Game and Inland Fisheries (Virginia Game Department) on February 15, 2017, indicating that it has no further concerns regarding the wood turtle, brook floater, and green floater species. This updates the EA language stating that consultation between Columbia and Virginia Game Department is ongoing.¹¹³

78. Virginia DEQ states there is potential for the Madison Cave isopod to be impacted by the project. It also states that if impacts on this species are expected, Columbia should

¹⁰⁸ EA at 113.

¹⁰⁹ FERC's Wetland and Waterbody Procedures, Section IV.A.1.d.

¹¹⁰ EA at 102.

¹¹¹ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 4.

¹¹² EA at 34, 166-168.

¹¹³ EA at 161.

contact Virginia DCR. This species is covered under Columbia's Multi-Species Habitat Conservation Plan. Accordingly, Columbia will implement applicable mitigation measures listed in the plan to minimize impacts on this species.¹¹⁴ As stated in the EA, Virginia FWS concurred on November 3, 2015, that impacts on this species will be minimized.¹¹⁵

79. Virginia DEQ states that the green floater is listed as threatened in Virginia and is downstream of the Loudoun Compressor Station. It also states that purple milkweed is documented in the vicinity of the Chantilly Compressor Station. To minimize adverse impacts on these species and the aquatic ecosystem at the Loudoun Compressor Station, Virginia DEQ recommends that Columbia (i) strictly adhere to local erosion and sediment control, and storm water management laws and regulations; (ii) establish riparian buffers with native plant species; and (iii) maintain natural stream flow. The EA states that Columbia's Environmental Construction Standards and the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and Wetland and Waterbody Procedures include measures to prevent erosion and sediment control.¹¹⁶ The Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* requires disturbed areas to be seeded in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or the request of the landowner or land management agency.¹¹⁷ In addition, Columbia will maintain natural stream flow for all waterbodies that are flowing at the time of construction using dry crossing methods, which include the use of dam and pump or flume crossing methods, as described in the EA.¹¹⁸

80. To minimize impacts on purple milkweed at the Chantilly Compressor Station and the Chantilly Line VA-1 Lateral, Virginia DCR (via Virginia DEQ's comments) recommends that the study area at the intersection of the two rights-of-way northwest of the proposed staging area be inventoried. With these survey results, Virginia DCR would be able to more accurately assess the potential impacts on this species and provide specific recommendations for minimizing impacts on the documented resources. Columbia conducted field surveys of the proposed Chantilly Compressor Station and

¹¹⁴ EA at 152.

¹¹⁵ *Id.*

¹¹⁶ EA at 31.

¹¹⁷ FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan*, Section V.D.3.b.

¹¹⁸ EA at 34.

Line VA-1 in August and October 2015. None of the global and state rare plant species identified by the Virginia DCR were observed within the proposed project workspaces. Furthermore, Columbia indicates that the Virginia DCR, in a September 23, 2016 letter, stated that the proposed construction within the Chantilly Compressor Station and Chantilly Lateral project areas, including the changes to the workspace to accommodate the horizontal direction drill (HDD), were not likely to impact state-listed threatened and endangered plant or insect species.

e. **Migratory Birds**

81. On June 1, 2017, Columbia filed a West Virginia bald eagle survey report. This report was filed with the West Virginia FWS, West Virginia Department of Natural Resources, and the Forest Service on April 7, 2017. Columbia states in the report that if the initiation of construction is delayed beyond February 2018, it would conduct aerial bald eagle nest surveys prior to construction. Columbia continues to coordinate with these agencies on bald eagle surveys and minimization measures.

82. On June 7, 2017, West Virginia FWS filed an additional letter regarding migratory birds and bald and golden eagles. It states that based on information provided in the report referenced above, West Virginia FWS concurs with the EA that construction and operation of the project will be in compliance with the National Bald Eagle Management Guidelines. West Virginia FWS recommends that Columbia adopt multiple conservation measures to reduce impacts on migratory birds, including clearing vegetation outside the nesting bird season, minimizing land and vegetation disturbance, avoiding permanent habitat alterations where birds are highly concentrated, avoiding fragmentation of large contiguous tracts of wildlife habitat, and developing a restoration plan.

83. As stated in the EA, Columbia will minimize impacts on birds by collocating the project along existing utility rights-of-way, and by constructing on open land, or abutting fragmented hardwood or managed forests. Columbia will also implement timing restrictions for the Indiana and northern long-eared bat in its Multi-Species Habitat Conservation Plan, which will minimize impacts on migratory birds on lands covered by the plan.¹¹⁹ Columbia has submitted a Restoration Plan to the Forest Service as part of its Construction, Operations, and Management Plan for its Special Use Permit,¹²⁰ and will comply with the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and Wetland and Waterbody Procedures, which require restoration throughout the entire project area. Approximately 91 acres of upland and forest habitat will be removed during construction, 41.9 acres of which will be retained for operation of the project.

¹¹⁹ EA at 138.

¹²⁰ EA at 68.

However, impacts on Important Bird Areas and Birds of Conservation Concern will be minimal. As part of its application for a Special Use Permit, Columbia will implement a Didymo Control Plan for activities within the Monongahela National Forest to minimize the spread of this non-native algal species.¹²¹ We find that the minimization measures recommended by West Virginia FWS are sufficiently addressed in the EA. The EA recommended Environmental Condition 16, which stated that comments regarding migratory birds from the West Virginia FWS should be provided prior to construction.¹²² Given that this recommended condition has been met, it is not included in the environmental conditions in Appendix B to this order.

5. Cultural Resources

84. In comments received from Virginia DEQ, the Virginia Department of Historic Resources, who represents the Virginia State Historic Preservation Officer (SHPO), states that it will be consulting on this project. As stated in the EA, Columbia completed identification surveys in Virginia, and in letters dated March 15, March 22, December 29, and December 30, 2016, the Virginia SHPO concurred that no historic properties would be affected by the project in Virginia.

85. The EA recommended Environmental Condition 18, which would require Columbia, prior to construction, to file a visual screening plan for the proposed Lost River Compressor Station expansion for review and written approval by the Director of the Office of Energy Projects. In a supplemental filing dated June 1, 2017, Columbia submitted a visual screening plan that commits to tree installation and maintenance to avoid adverse effects to the Arthur Smith and the Dr. B.G. Moyers Farmsteads. In a supplemental filing dated June 15, 2017, the West Virginia SHPO concurred that with the visual screening plan, there would be no adverse effects to historic properties. We accept the visual screening plan. Given that this recommended condition has been met, it is not included in the environmental conditions in Appendix B to this order.

86. The EA recommended Environmental Condition 19, which would require Columbia, prior to commencing construction of project facilities in West Virginia, to file with the Commission: (i) documentation of additional cultural resources surveys in West Virginia; (ii) site-specific avoidance or treatment plans as required; (iii) comments from the West Virginia SHPO; and (iv) consultation records with the National Park Service – American Battlefield Protection Program. All cultural resources surveys and plans have been completed for the project and the West Virginia SHPO has provided comments. Therefore, section 106 consultation is complete. Given that this recommended condition

¹²¹ EA at 128.

¹²² EA at 304.

has been met, it is not included in the environmental conditions in Appendix B to this order.

6. Air Quality

87. Virginia DEQ provides comments affirming their regulatory jurisdiction under the Clean Air Act and Virginia's Air Pollution Control Law and recommends mitigation measures related to fugitive dust, open-burning, and construction-related air emissions. Columbia provided a Fugitive Dust Control Plan with its application for the WB XPress Project which contains the control methods described from the Virginia Regulations for the Control and Abatement of Air Pollution. As described in the EA,¹²³ Columbia will chip or haul offsite to a commercial disposal facility all non-merchantable timber and cleared vegetation. Should burning be required, Columbia has committed to obtaining the required burn permits and adhering to all local and state regulations. Regarding the air quality nonattainment areas identified by Virginia DEQ, Commission staff analyzed estimates of non-permitted emission in these areas and concluded they will not exceed general conformity applicability thresholds.¹²⁴

7. Land Use

88. Jack Wilkins, an affected landowner, expresses concern that Columbia's proposed staging area on his property cannot be coordinated with his current farming operations. He states that the proposed 16-acre staging area represents the center of grazing operations for 150 calf-cow pairs. According to Mr. Wilkins, the staging area will make harvesting hay impossible, and will cut off handling facilities from the pasture.

89. Mr. Wilkins also expresses concern that soil contamination and compaction in the staging area might impact the land's future productivity. Further, he is concerned that the stream running through the staging area will be contaminated. The EA addresses impacts on soils and waterbodies in sections B.1.2 and B.2.2, respectively, as well as Columbia's commitment to implement its Spill Prevention, Containment, and Control Plan to minimize the potential for spills that might contaminate these resources. We find that the EA sufficiently addresses the potential impacts of contamination on soil and waterbodies.

90. Mr. Wilkins states that he suggested an alternate site that Columbia approved, but that the alternate site was not in the agreement with Columbia. He is also concerned that the staging area on his property will contain a graveyard with 20-25 graves from the late 1800's and 1900's and a 100-year-old apple orchard. Columbia states it has been

¹²³ EA at 29.

¹²⁴ EA at 221.

actively working with the Wilkins on possible modifications to the staging area on their property. The locations of the graveyard and orchard had been previously identified on the property by field surveys, and Columbia met with Mrs. Wilkins on the property to verify their location. Construction has been planned to avoid the graveyard and orchard. In addition to Columbia's commitment to avoid disturbing the graveyard or orchard, and to coordinate with the Wilkins on the proposed staging area modifications, Columbia indicates that it will continue to work with the Wilkins to address all of their concerns through ongoing communications and negotiations.¹²⁵

91. Columbia provided two filings, on April 24 and May 23, 2017, which provide further analysis of Monongahela National Forest parcel boundaries. Columbia performed partial boundary surveys where the pipeline easement crosses Monongahela National Forest property boundaries and summarized the impact changes in the April 24, 2017 filing. Columbia also summarizes the outstanding survey requirements for each of the boundary shift locations in this filing. In the May 23, 2017 filing, Columbia revised its boundary investigation results summary table, associated exhibits, and outstanding survey requirements. On May 25, 2017, the Forest Service filed concurrence with Columbia's boundary analysis and environmental survey status. The Forest Service notes that the term "long-term right-of-way" should be used for National Forest System land roads that will be used indefinitely, and that Columbia may modify additional temporary workspaces.

8. Columbia's Project Clarifications

92. Columbia provides clarifications regarding the construction schedule, environmental compliance and monitoring, non-jurisdictional facilities, soils, wetlands, fisheries, sensitive and federally listed species, cultural resources, and construction methods. While these clarifications are noted below or in the relevant sections above, they do not change the conclusions reached in the EA.

93. Columbia comments that the EA incorrectly states that Columbia will inspect its installed erosion control devices along the construction right-of-way on a daily basis regardless of whether or not active construction was taking place on that portion of the right-of-way.¹²⁶ We agree with Columbia that the correct inspection interval required of Columbia for inspecting its erosion control devices is once a week in areas of inactive construction, and once a day in areas of active construction.

¹²⁵ Columbia's May 26, 2017 Response to EA Comments, Attachment A at 4.

¹²⁶ EA at 71.

94. Columbia comments that the EA incorrectly states that soil compaction testing will occur on all areas disturbed by construction.¹²⁷ We concur that, outside of the soil compaction testing and decompaction procedures outlined for National Forest System lands, Columbia is only required to test for compaction in agricultural and residential areas.

95. Columbia correctly points out that the EA states the preferred hydro-seeding application method involves the use of Flexterra TM along the entirety of the right-of-way.¹²⁸ Although we support Flexterra as one seeding option among many for rights-of-way in steep or complex terrain, aside from the National Forest System lands seeding requirements for use of Flexterra and other methods of reseeding, we do not require any particular type of seeding method. Columbia may choose to employ any effective method to meet the requirement of right-of-way stability and successful vegetative restoration for non-National Forest System lands.

96. Columbia provides clarification that although five environmental inspectors will be employed, all five will not be on the site at the same time. Pursuant to the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan*, the actual number of environmental inspectors will depend on the length of the construction spread and the number and significance of the resources to be affected.¹²⁹

97. While the EA indicates that all proposed improvements at the Loudoun Compressor Station will be completed by Columbia, Columbia clarifies that Dominion Cove Point, LP (Dominion) will now be responsible for a portion of the facilities at the Loudoun Compressor Station. Specifically, Dominion will install the meter station equipment, filtration, and flow control. Instead of three meters, only one will be installed. Although Dominion would obtain all applicable permits and authorizations for this activity, the workspace would be contained within workspace Columbia identified in its application for the Loudoun Compressor Station facilities. Therefore, impacts as a result of construction of the facilities will not increase beyond those evaluated in the EA. Columbia also provides a new construction schedule for the Loudoun Compressor Station, estimating that construction will start in August 2017 and end in December 2017.

98. Columbia clarifies that inspections of all temporary erosion and sediment controls will occur at least once every seven calendar days for areas where no construction is

¹²⁷ EA at 77.

¹²⁸ EA at 114.

¹²⁹ EA at 39.

taking place, and within 24 hours of each storm event accumulating 0.5 inch or more of precipitation.¹³⁰

99. The EA states that the project will not adversely affect essential fish habitat; therefore, further consultation with the National Oceanic and Atmospheric Administration Fisheries (NOAA) is not required. However, in a footnote, the EA states that Columbia requested concurrence from NOAA, but that NOAA had not responded. Columbia corrects this statement, indicating that NOAA determined, on May 11, 2016, that the project will not have a direct impact on trust resources or essential fish habitat.¹³¹

100. Columbia clarifies that although the correct sources for hydrostatic test water are listed on page 268 of the EA, page 132 incorrectly states that Columbia will obtain hydrostatic test water from the Dry Fork Creek and the North Fork South Branch Potomac River.

101. Columbia also clarifies that the use of the HDD method on Line VA-1 is contingent on its geotechnical investigation. It also indicates that should HDD not be feasible, residential plans will be implemented.¹³² If HDD is feasible, Columbia clarifies that it will develop and implement mitigation measures that include a noise mitigation plan.

102. Based on the analysis in the EA, as supplemented herein, we conclude that if the project is constructed and operated in accordance with Columbia's application and supplements, and in compliance with the environmental conditions in Appendix B to this order, our approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

103. 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

¹³⁰ EA at 71.

¹³¹ See Columbia's June 14, 2016 Supplemental Filing, Appendix 1F (Agency Correspondence).

¹³² EA at 190 and Appendix C. Columbia developed site-specific residential construction plans for all residences located within 50 feet of proposed construction work areas.

local laws, may prohibit or unreasonably delay the construction or abandonment of facilities approved by this Commission.¹³³

IV. Conclusion

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

The Commission orders:

(A) A certificate of public convenience and necessity is issued authorizing Columbia to construct and operate the WB XPress Project, as described more fully in this order and in the application.

(B) The certificate authorized in Ordering Paragraph (A) is conditioned on Columbia's:

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

(2) compliance with all applicable Commission regulations under the NGA, particularly the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations; and

(3) compliance with the environmental conditions listed in Appendix B to this order.

(C) Columbia shall file a written statement affirming that it has executed firm contracts for the capacity levels and terms of service represented in signed precedent agreements, prior to commencing construction.

¹³³ See 15 U.S.C. § 717r(d) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); see also *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

(D) Columbia's proposed initial recourse rates for firm transportation service using the WB XPress Project capacity are approved, subject to the conditions described herein.

(E) Columbia's request for a pre-determination supporting rolled-in rate treatment for costs and billing determinants for its TCRA, EPCA, OTRA and RAM surcharges is granted, absent a significant change in circumstances, as more fully described above.

(F) Columbia shall file actual tariff records no earlier than 60 days, and no later than 30 days, prior to the date the project facilities go into service.

(G) Columbia shall maintain separate books and accounting of costs attributable to the proposed incremental services, as described above.

(H) Columbia shall notify the Commission's environmental staff by telephone, e-mail, and/or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Columbia. Columbia shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(I) The Shenandoah Group's request for a formal hearing is denied.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A**Intervenors****Columbia's WB XPress Project, Docket No. CP16-38-000**

- Appalachian Group (Appalachian Mountain Advocates, Appalachian Voices, Chesapeake Climate Action Network, and the Virginia and West Virginia chapters of Sierra Club)
- Atmos Energy Marketing LLC
- Calpine Energy Services, L.P.
- City of Charlottesville, Virginia
- City of Richmond, Virginia
- County of Fairfax, Virginia
- Dominion Cove Point LNG, LP
- Dominion Transmission, Inc.
- Duke Energy Kentucky, Inc.
- Exelon Corporation
- Donnell R. Fullerton
- Independent Oil & Gas Association of West Virginia
- National Fuel Gas Distribution Corporation
- National Grid Gas Delivery Companies
- New Jersey Natural Gas Company
- NiSource Distribution Companies (Columbia Gas of Kentucky, Inc., Columbia Gas of Maryland, Inc., Columbia Gas of Ohio, Inc., and Columbia Gas of Virginia, Inc.)
- NJR Energy Services Company
- NY State Electric & Gas Corporation
- Orange and Rockland Utilities, Inc.
- Park Authority of Fairfax County, Virginia
- Piedmont Natural Gas Company, Inc.
- PSEG Energy Resources & Trade, LLC
- Public Service Company of NC, Inc.
- Range Resources-Appalachia LLC
- Shenandoah Group (Shenandoah Valley Network, Highlanders for Responsible Development, Inc., Virginia Wilderness Committee, Shenandoah Valley Battlefields Foundation, and Natural Resources Defense Council)
- UGI Distribution Companies
- United States Gypsum Company
- Washington Gas Light Company

Appendix B
Environmental Conditions
Columbia's WB XPress Project, Docket No. CP16-38-000

As recommended in the Environmental Assessment (EA), and modified herein, this authorization includes the following conditions:

1. 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 EA, unless modified by the order. Columbia must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP, or the Director's designee, has delegated authority to (1) issue (or deny) any approvals or authorizations necessary to carry out the conditions of this order, and (2) take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the WB XPress Project (Project). This authority may include:
 - a. the modification of conditions of the order; and
 - b. the imposition of additional measures, **including stop-work authority**, to ensure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of 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, environmental inspectors (EI), and contractor personnel will be informed of the EIs' authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **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 the Natural Gas Act (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 pipelines or aboveground 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, contractor/pipeyards, additional access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area**.

This requirement does not apply to extra workspace allowed by our *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 Certificate and before construction begins**, Columbia shall file an Implementation Plan with the Secretary for review

and written approval by the Director of OEP. Columbia must file revisions to the plan as schedules change. The plan shall identify:

- a. how Columbia will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the order;
 - b. how Columbia will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so 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 will ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Columbia will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in 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 will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or Program Evaluation Review Technique (PERT) chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Columbia shall employ at least one EI per construction spread. The EIs shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the order and other grants, permits, certificates, or 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 **bi-weekly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
- a. an update on Columbia's efforts to obtain the necessary federal authorizations;
 - b. the construction status of the 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, and their cost;
 - 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 must receive written authorization from the Director of OEP **before commencing construction 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).
10. Columbia must receive written authorization from the Director of OEP **before placing the Project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **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 and installed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the Certificate conditions Columbia has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of the OEP, a site-specific blasting plan for use in the State of Virginia that includes the procedures for monitoring and mitigation of the potential effects of bedrock blasting on surface structures, water wells, and other buried utilities.
13. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of OEP, a revised Environmental Construction Standards that is consistent with the *Upland Erosion Control, Revegetation, and Maintenance Plan* at sections III.E., V.A.3, V.A.4., and V.A.6.
14. **Prior to construction**, Columbia shall:
 - a. file with the Secretary the location by milepost of all water wells and potable springs within 150 feet of construction workspaces, and within 500 feet of construction work spaces if in karst terrain, and identify the distance of each well from the construction workspace;

- b. file with the Secretary, for review and written approval of the Director of OEP, specific protection and mitigation measures for any water wells or potable springs located within the construction workspace; and
 - c. offer to conduct, with the well owner's permission, pre- and post-construction monitoring of well yield and water quality for wells within 150 feet of construction workspaces.
15. **Within 30 days of placing the facilities in service**, Columbia shall file a report with the Secretary discussing whether any water well and potable spring complaints were received concerning well yield or water quality and how each was resolved.
16. **Prior to construction of the Line VA-1 horizontal directional drill**, Columbia shall file with the Secretary, for the review and written approval by the Director of OEP, a noise mitigation plan to reduce the projected noise levels at the noise sensitive areas (NSA). During drilling operations, Columbia shall implement the approved plan, monitor noise levels, and make all reasonable efforts to restrict the noise attributable to the drilling operations to no more than an 24-hour A-weighted day-night averaged sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at the NSAs.
17. Columbia shall file a noise survey with the Secretary **no later than 60 days** after placing each of the compressor stations into service. If a full load condition noise survey is not possible, Columbia shall provide an interim survey at the maximum possible power load and provide the full power load survey **within six months**. If the noise attributable to the operation of all the equipment at any facility at interim or full power load 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 the recommended noise level **within one-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. **Prior to construction**, Columbia shall file with the Secretary the final Special Use Permit for construction on National Forest System lands.

Document Content(s)

CP16-38-000.DOCX.....1-46