145 FERC ¶ 61,153 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman; Philip D. Moeller, John R. Norris, Cheryl A. LaFleur, and Tony Clark.

Columbia Gas Transmission, LLC

Docket No. CP13-8-000

ORDER ISSUING CERTIFICATE

(Issued November 21, 2013)

1. On October 22, 2012, Columbia Gas Transmission, LLC (Columbia) filed an application pursuant to section 7(c) of the Natural Gas Act (NGA) requesting authorization to construct and operate pipeline and appurtenant facilities in Baltimore and Harford Counties, Maryland (Line MB Expansion Project). As discussed below, the Commission will grant the requested authorization, subject to conditions.

I. <u>Background and Proposal</u>

2. Columbia is a natural gas company, as defined by NGA section 2(6), that transports natural gas in interstate commerce. Columbia operates facilities in Delaware, Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

3. Columbia proposes to construct and operate pipeline facilities to extend its Line MB to loop part of its Line MA. Specifically, Columbia proposes to:

- construct approximately 21.1 miles of 26-inch diameter pipeline from the current terminus of Columbia's existing Line MB located near Owings Mills in Baltimore County, Maryland to Columbia's existing Rutledge Compressor Station in Harford County, Maryland;
- install crossover pipelines at the Owings Mills Metering and Regulating Station (M&R), the Beaver Dam M&R, and the Manor Road M&R, and a mainline valve near the Rutledge Compressor Station (Rutledge) to enable crossover flow between Lines MB and MA;

- install two 26-inch x 30-inch, bi-directional pig launcher/receivers: one at the existing, fenced-in Owings Mills metering station site and another near the Rutledge Compressor Station adjacent to the existing Line MA mainline valve on the existing compressor station site; and
- install two 26-inch, below-grade, mainline valves at points on the proposed Line MB extension near existing mainline valves on Columbia's Line MA near Beaver Dam Road and Manor Road in Baltimore and Harford Counties.

4. Columbia states that it plans to construct the proposed facilities in two phases: Phase I would consist of an approximately 5.1-mile pipeline segment, together with the Manor Road valve and crossover pipe, the Rutledge valve and pigging facilities, and other appurtenances, from milepost (MP) 16 to the Rutledge Compressor Station. Phase II would consist of a 16-mile pipeline segment, as well as the Owings Mills crossover pipe and pigging facilities, the Beaver Dam Road valve and crossover pipe, and other appurtenances, from MP 0 to MP 16. Columbia proposed to place Phase I into service by October 31, 2013, and Phase II by October 31, 2014.¹

5. Columbia states that the proposed Line MB Expansion Project is part of a systemwide, approximately \$2 billion, five-year, modernization program designed to improve its aging infrastructure.² Columbia states that the program comprises many discrete projects, identified through a risk-based prioritization process, designed to increase pipeline safety and service reliability. Columbia identified Line MA, from Owings Mills to Rutledge, as the one of its highest priorities because it serves Baltimore Gas & Electric Company's (BG&E) large metropolitan market and additional significant markets farther north and east. Columbia states that customers served from Line MA are susceptible to prolonged outages if service is required to be interrupted for repairs or maintenance because Columbia has only a single line in that corridor. Columbia further states that no other pipelines in the area directly connected to BG&E have capacity available during high flow periods to adequately provide emergency replacement gas deliveries. Columbia estimates the proposed facilities will cost approximately \$131.9 million and seeks a pre-determination supporting rolled-in rate treatment for those costs.

¹ Appendix E of the rate settlement regarding recovery of the costs of Columbia's Modernization Program in Docket No. CP12-1021, Columbia Gas Transmission, LLC, 142 FERC \P 61,062 (2013).

² Columbia estimates that approximately 73 percent of its 12,000-mile system was constructed before Federal pipeline safety standards were enacted in 1970, and that, among other physical vulnerabilities, its system includes approximately 1,272 miles of bare steel pipeline, which is at high risk for corrosion and failure.

II. <u>Notice, Interventions, Comments, and Answers</u>

6. Notice of Columbia's application was published in the *Federal Register* on November 7, 2012 (77 Fed. Reg. 66,825). The parties listed in Appendix A filed timely, unopposed motions to intervene.³

7. Seven parties filed late motions to intervene.⁴ These movants have demonstrated an interest in this proceeding. The untimely motions to intervene will not delay, disrupt, or unfairly prejudice any parties to this proceeding. Thus, we will grant the untimely motions to intervene pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure.

8. We received many comments regarding the project's potential environmental impacts, which were addressed in the environmental assessment (EA) prepared for the project. We also received comments on the EA, to which Columbia filed answers. The comments and answers are addressed below.

III. <u>Discussion</u>

9. Since Columbia proposes to construct and operate facilities used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposal is subject to the requirements of NGA section 7 (c) and (e).⁵

A. <u>Application of the Certificate Policy Statement</u>

10. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.⁶ The Certificate Policy Statement established 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 explained that in deciding whether to authorize the construction of major new natural gas facilities, the

⁵ 15 U.S.C. §§ 717f(c) and 717f(e) (2006).

⁶ 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).

³ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. *See* 18 C.F.R. § 385.214 (2012).

⁴They are PSEG Energy Resources & Trade LLC; Maryland People's Council; William M. Kenney; Michael C. and Sally Ann Mickel; Charles D. and Nancy C. Hoover; Orville R. and Eleanor M. Hughes; and UGI Distribution Companies.

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.

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

12. As discussed above, the threshold requirement for pipelines proposing new projects is that the pipeline must financially support the project without relying on subsidization from its existing customers. The facilities proposed for construction here are intended to help Columbia address system integrity issues and enhance the service reliability to existing customers. Columbia explains that the project is part of a system-wide modernization program that targets vulnerable areas of its system and is needed to reduce the likelihood of service outages in large metropolitan markets like greater Baltimore in instances where Line MA needs repairs or maintenance. We find that including such costs in the existing customers' rates does not constitute subsidization.⁷ Moreover, as discussed below, a general rate settlement the Commission recently approved includes the costs associated with the proposed facilities.⁸ Accordingly, we find that Columbia's proposal satisfies the Certificate Policy Statement's no-subsidy requirement.

13. We also find that the proposal will not degrade service to Columbia's existing customers. In fact, the project will enhance Columbia's ability to reliably meet its existing firm transportation service obligations. It will not adversely affect Columbia's certificated transportation capacity and will enhance Columbia's ability to continue to meet its customers' peak hour and peak day demands. In addition, it will not adversely

⁷ See Certificate Policy Statement, 88 FERC ¶ 61,227, at n.12 (1999).

⁸ Columbia Gas Transmission, LLC (Columbia), 142 FERC ¶ 61,062 (2013).

affect existing pipelines in the region or their captive customers because the proposal only affects Columbia's own facilities and will not change customer requirements or system capacity. Also, no pipeline company has protested Columbia's application.

14. As discussed in greater detail below, and in the EA, the proposed project will disturb approximately 305.4 acres of land. In order to minimize impacts on landowners, Columbia proposed to construct the project facilities primarily on existing rights-of-way and areas adjacent to existing rights-of-way. About 78 percent of the proposed Line MB expansion is parallel to existing rights-of-way. Columbia has worked extensively with nearby landowners and has accommodated numerous variations and alternative routing proposals. We find that the project should not significantly affect landowners and the surrounding community. Accordingly, we find that Columbia has designed the project to minimize any adverse impacts on landowners and surrounding communities.⁹

15. The Environmental Protection Agency (EPA) asks for clarification that the project is intended to increase operational flexibility and to enhance system reliability, not to add any additional transportation capacity – more specifically, it asks for more detailed information regarding the project's role in the existing pipeline configuration and how the project will not stimulate additional shale gas production.

16. We note that Columbia's December 13, 2012 response to a staff data request states that Columbia does not anticipate its facilities' utilization rate to increase significantly as a result of the project, noting that periodic variations due to factors like weather and seasonal market fluctuations are normal. Columbia further explains that the project's express purpose is specifically not to add capacity that it could sell, but to increase system reliability and operational flexibility.

17. Columbia further explains that it will operate its system from the Loudoun Compressor Station, located upstream of Owings Mills, to Rutledge with a "System Flexibility" delivery of 19,800 dekatherms per day (Dth/d) at Rutledge and a "System Flexibility" receipt of the same quantity (adjusted for compressor fuel) at Loudoun. By reserving the 19,800 Dth/d for "System Flexibility," Columbia will make this capacity unavailable to Columbia's shippers. Thus, the amount of firm capacity available for sale along this route will be the same before and after the project.

18. The EPA also asks the Commission to elaborate on the project's stated purpose and need by identifying which communities' service the project will improve and how improving service reliability will maintain current levels of gas consumption in those communities. A number of other commenters also allege that Columbia has not substantiated the need for the proposed facilities. Gunpowder Riverkeeper claims that

⁹ This order's environmental section addresses commenters' concerns about potential project impacts on property values.

the efficacy of expanding Line MB incrementally in a 21.1-mile long section to provide reliability is speculative, and Woodsbrook Martino contends that Columbia fails to provide evidence of past outages or problems that would render the existing pipeline inadequate to reliably meet current needs.

19. Columbia's December 13, 2012 data response states that the project's purpose is to: (1) increase Columbia's options for performing routine and unscheduled maintenance on this single-line portion of its system while maintaining existing service to its customers and (2) create the operational means to continue to serve customers directly connected to Columbia's system and systems farther north in case of a catastrophic failure of the single pipeline now serving this region. Columbia indicates that the communities that would benefit from the enhancement are communities located in Virginia, Maryland, Delaware, Pennsylvania, New Jersey, and New York that are served by Old Dominion Electric Cooperative, Eastern Shore Gas Transmission, Lukens Steel, Delmarva Power & Light, South Jersey Natural Gas, UGI, Orange & Rockland, Public Service Electric & Gas, and Columbia of Pennsylvania, as well as BG&E.

20. Historically, Columbia states, it has scheduled service outages required for maintenance during periods of moderate weather when demands on its system for power generation and residential consumption are low, thereby minimizing the impacts to end users. The potential exists, however, and has occurred in the past on similarly configured sections of its system, for outages, planned or unplanned and upstream or downstream of a delivery point, to cut customers off from gas deliveries indefinitely. For example, if a service outage is scheduled on the downstream side of a delivery point, and during that planned maintenance, an unexpected outage (due to third party damage, for example) occurs on the upstream side of the delivery point, service to customers through that delivery point would be cut off until Columbia could make the planned and unplanned repairs. This is the kind of circumstance Columbia designed this project to avoid; Columbia asserts, correctly, that a second line on this part of Columbia's system would enable uninterrupted service to Columbia's customers during needed repairs.

21. Moreover, Columbia's modernization program is aligned with the Department of Transportation's (DOT) initiative for pipeline safety that urges pipeline operators to reinvest in their infrastructure to ensure continued pipeline safety and reliability. Further, new Pipeline and Hazardous Materials Safety Administration (PHMSA) rules will require more frequent inspection and maintenance of pipelines, thereby increasing the likelihood of service outages on any given single-line pipeline segment. We also note that Exelon Corporation (of which BG&E is a subsidiary), Washington Gas Light Company, and the NiSource Distribution Companies – all shippers on Columbia's system -- have filed comments supporting Columbia's proposal, noting similar benefits.

22. Based on the discussion above and in the Engineering section of this order below, we find that Columbia has substantiated the need for the proposed project. The proposed facilities will increase the reliability of Columbia's Line MA between Owings

Mills and Rutledge. No shipper on Columbia's system filed comments questioning the need for the project. Based on the benefits the project will provide and the minimal adverse impacts on existing shippers, other pipelines and their captive customers, and landowners and surrounding communities, we find, consistent with the Certificate Policy Statement and NGA section 7, that the public convenience and necessity requires approving Columbia's proposal, subject to the conditions discussed below.

B. <u>Rolled-in Rate Treatment</u>

23. Columbia requests a determination that the project is consistent with the Certificate Policy Statement's criteria for rolled-in rate treatment of costs. Columbia notes that Commission policy recognizes the appropriateness of rolled-in rate treatment for projects constructed to improve the reliability of service to existing customers, rather than to increase levels of service. Columbia states that, although the project will create additional localized capacity, it will not use such capacity to provide incremental service. Columbia states that instead, it will use the additional capacity created solely to increase pipeline system reliability and, as a by-product, system flexibility.

24. Columbia also notes that the MB Line Extension is an Eligible Facility¹⁰ as described in the Modernization Program approved as part of Columbia's most recent NGA general rate settlement (Settlement).¹¹ Because the extension is an Eligible Facility under that program, Columbia will recover its costs through its new tariff mechanism – the Capital Cost Recovery Mechanism (CCRM).¹² Consistent with the terms of the CCRM, Columbia will make annual limited section 4 filings during the five-year initial term of the mechanism to recover certain MB Line Extension costs, along with other Eligible Facilities' costs. Thus, there is no initial rate proposal to approve in this proceeding.

¹² Columbia Gas Transmission, LLC, FERC NGA Gas Tariff, Baseline Tariffs, <u>Gen. Terms & Conditions, Capital Cost Recovery Mechanism, 1.0.0</u>. The CCRM allows Columbia to recover, through an additive capital demand rate, its revenue requirement associated with up to \$300 million in annual capital investments in Eligible Facilities placed in service under the Modernization Program from January 1, 2013 through December 31, 2017. Each annual CCRM Rate filing will have an effective date of February 1, and shall include revenue requirements related to Eligible Facilities placed in service and remaining in service during the prior November 1 through October 31 period.

¹⁰ Columbia's Modernization Program Settlement in Docket No. RP12-1021 defines "Eligible Facility" as a facility placed in service under the Modernization Program; the term as used here is not the same meaning as an "Eligible Facility" as defined in the Commission's Regulations in Part 157, Subpart F.

¹¹ Columbia Gas Transmission, LLC (Columbia), 142 FERC ¶ 61,062 (2013).

25. Appendix E of the Settlement designates the MB Line Extension as an Eligible Facility for the purpose of increasing system reliability and flexibility, and any increase in capacity will be localized and incidental. Accordingly, we will grant Columbia's requested predetermination for rolled-in treatment as consistent with the Certificate Policy Statement's criteria.¹³

C. <u>Engineering</u>

26. The Commission staff's analysis of Columbia's Exhibit G and flow models indicates that the proposed 21.1-mile, 26-inch diameter Line MB extension would increase service reliability in the Baltimore, Maryland area by looping Line MA, which is currently a single-feed pipeline. Under the existing configuration, Columbia schedules service outages required for maintenance only during periods of moderate weather, when demands on its system for power generation and residential consumption are low, to minimize impacts to end users. The proposed facilities will enable Columbia to conduct more frequent maintenance and preventative pipeline inspections, which new PHMSA rules will require, performing maintenance and inspections on one line while maintaining delivery requirements to its shippers on the other line.

27. Staff's analysis also shows, among other things, that on a typical winter day, when normal operating pressures range between 450 pounds per square inch gauge (psig) and 750 psig, the proposed facilities would create an additional 10,400 Dth of line pack, which would increase hourly delivery capabilities and flexibility for service to Columbia's southern New Jersey and Washington, DC market areas, as well as to Baltimore, Maryland.

D. <u>Environmental Analysis</u>

28. Commission staff began its environmental review following the grant of approval for Columbia to use the pre-filing process on January 24, 2012, in Docket No. PF12-6-000. As part of the pre-filing review, the staff issued a *Notice of Intent to Prepare an Environmental Assessment* (NOI), which was published in the *Federal Register*.¹⁴ The NOI was 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. Commission staff held two public scoping meetings in communities near the proposed facilities to provide the public with an opportunity to learn more about the project and to comment on any environmental issues associated with the project.

¹³ Certificate Policy Statement, 88 FERC ¶ 61,227 at n.12.

¹⁴ 77 Fed. Reg. 24,193 (April 23, 2012).

29. In response to comments about its originally planned pipeline route, Columbia revised the route between MPs 16.5 and 21.1. On August 9, 2012, the Commission issued a *Supplemental Notice of Intent to Prepare an Environmental Assessment for the* Planned *Line MB Extension Project and Request for Comments on Environmental Issues* (Supplemental NOI) that addressed the revised route. The Supplemental NOI was sent to the same parties as the initial NOI, as well as to the affected property owners along the revised pipeline route.

30. We received comments responding to the NOI and Supplemental NOI from the U.S. Army Corps of Engineers (Army Corps of Engineers), Maryland Department of Planning (Maryland DP), Maryland Department of Natural Resources (Maryland DNR), the Office of the County Executive of Harford County (Harford County Executive), Senator Benjamin L. Cardin, Senator Barbara A. Mikulski, Congressman Elijah E. Cummings, Congressman C.A. Dutch Ruppersberger, Congressman John Sarbanes, State Senator Bobby Zirkin, and over 125 individuals. We also received verbal comments from 55 individuals at the public scoping meetings. The primary issues raised during the public scoping process concerned: the need for the project; preparation of an environmental impact statement (EIS) rather than an EA; erosion and sedimentation; soil compaction; impacts on water wells and septic systems, including septic reserve areas (SRAs); contamination from known contaminated sites; impacts on wetlands, fish, wildlife, vegetation, and ecosystems; forest fragmentation; impacts on migratory birds; impacts on federally listed threatened and endangered species, including bog turtles; impacts on Gunpowder Falls State Park, Oregon Ridge Park, and Gwynnbrook Wildlife Management Area; impacts on conservation easements; loss of property rights; eminent domain; proximity of the project to homes; impact on coastal zone management areas; noise impacts; air impacts; greenhouse gas emissions; safety during construction and operation; and pipeline route alternatives.

31. To satisfy National Environmental Policy Act (NEPA) requirements, our staff prepared an EA with the cooperation of the Army Corps of Engineers. The EA's analysis 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, as well as all substantive comments received during the public scoping review. The EA concludes that the project's construction and operation will not constitute a major federal action significantly affecting the quality of the human environment.

32. The EA was issued for a 35-day comment period and placed into the public record on April 19, 2013. The EPA; the Maryland DNR; State Senator Barry Glassman; Gunpowder Riverkeeper; Oregon Ridge Nature Center Council, Inc. (Oregon Ridge Council); Chesapeake Climate Action Network; Mid-Atlantic Council Trout Unlimited

(Trout Unlimited); affected landowners;¹⁵ and members of homeowner associations¹⁶ filed comments. The Maryland DP filed comments for the State Clearinghouse, which includes comments from the Maryland Department of Transportation (Maryland DOT), the Maryland Historical Trust (Maryland HT), Baltimore County, the Maryland Department of the Environment (Maryland DE), Maryland DP, and Harford County. Columbia also filed comments on the EA, responding to several comments filed on the EA by others, and requesting clarifications.

33. The Maryland DOT, Maryland HT, and Baltimore County find the project consistent with their plans, programs, and objectives. The Maryland DNR, Maryland DE, Harford County, and Maryland DP find the project generally consistent with their plans, programs, and objectives, but filed qualifying comments, which are addressed below.

34. Many of the issues raised during scoping were revisited in comments on the EA. These issues are further addressed below and include: scope of review; need for an EIS; public participation; cumulative impacts; baseline mitigation measures; hazardous and contaminated materials; waterbody crossing methods; surface water quality impacts; hydrostatic testing and pipe coating issues; thermal degradation; environmental justice; threatened and endangered species; invasive species; public and private water wells; septic systems and septic reserve areas; Oregon Ridge Nature Center and Park; property values, access and easements; access to properties; public safety; site-specific landscaping and residential plans; greenhouse gas and emissions; and alternatives.

¹⁶ A consultant filed comments on behalf of Mr. and Mrs. W. Cole, Mr. and Mrs. D. Cook, Mrs. C. Lowe, Mr. and Mrs. M. Martino, Mr. and Mrs. K. Menken, Mr. and Mrs. D. Peterson, Mr. and Mrs. J. Quick, Mr. and Mrs. J. Rush, Mr. and Mrs. A. Shellhouse, Mr. and Mrs. P. Sitaras, and Mr. and Mrs. F. Tedeschi, all on Kings Arm Drive in Harford County and members of the Woodsbrook or Bakersfield Homeowners' Associations (Woodsbrook Bakersfield).

¹⁵ Edward and Diana O'Loughlin (three filings); Susan and Frank Tedeschi (three filings); Michael and Sally Mickel; M. Dolores and David G. Lavin; Zonda Landis; Arnold Simon; David Raymond (two filings); Linda and Stephen Scherr; William Kenney (Kenney) for himself and representing the Hess Road Coalition (five filings); James R. and Neale R. Bierer; Julia A. Wilhelm; Ledley Boyce (three filings); Donald Rocker; Arlene (no last name); the Woodsbrook Homeowners Association and the Martino Farm (Woodsbrook Martino) (four filings); Joseph Sobolewski; Andrew Heeter; the Hazelwood Community Association; and Frank and Tracey Keeney.

Scope of Review

35. Gunpowder Riverkeeper argues that consideration of Columbia's proposal in this proceeding constitutes segmentation, claiming that the project is linked to the export of natural gas through the Dominion Cove Point, LP's pending liquefied natural gas (LNG) project and that the Commission must assess the "overall project's" cumulative impacts, which, it asserts, would require an EIS. It also argues that Columbia's proposal, as part of a system-wide, five-year Modernization Program, "is subversive to NEPA and akin to piece-mealing," citing The Indian Lookout Alliance, et al. v. John A. Volpe, which addressed how to determine the minimum appropriate length of a highway project to be environmentally considered under NEPA. In that case, the court found that the test is whether the length selected assured adequate opportunity for the consideration of whether and where to build. The court explained that the nature of the proposal will bear on the determination of the appropriate length – if the major objective of a proposal is to connect two cities, for example, then these two termini should determine the proper scope of the EIS. Absent a showing of piece-mealing to avoid statutory requirements, there is no requirement that one EIS cover all segments. The court held that the length of highway segment at issue was not appropriate for purposes of NEPA review because it did not have an independent utility of its own, which would require that it end in major termini.¹⁷

The major objective of the proposal at issue here, however, is to increase the 36. safety of an existing pipeline system, as DOT urges and PHMSA requires, and to improve the reliability of service on that existing system to Columbia's market in Baltimore, Maryland by extending an existing pipeline loop 21.1 miles farther downstream along part of that existing system. The termini of the proposed segment of Line MB Expansion pipeline loop are (1) the terminus of Columbia's existing Line MB, which loops a segment of its existing Line MA, and (2) an existing compressor station located 21.1 mile downstream on Line MA. The proposed segment of pipeline loop indeed has an independent utility of its own because it loops the existing segment of Line MA that contains the delivery points for service to Baltimore, Maryland, and therefore fulfills the primary objective of improving the reliability of service to that market. The utility of looping this segment of Line MA is independent of enhancements to other parts of Columbia's system – authorization, construction, and operation of the facilities at issue in this proceeding will have no impact on the authorization, construction, or operation of any other segments of Columbia's modernization program.

¹⁷ 484 F.2d 11 (8th Cir. 1973).

Need for an Environmental Impact Statement

37. Gunpowder Riverkeeper states that the EA does not show that measures will be in place to sufficiently protect the environment or that using part of an existing right-ofway somehow exempts the project from thorough environmental review as a major pipeline requiring an EIS under section 380.6(a)(3) of the Commission's regulations. It further states that the project is controversial, claiming that the general public, stakeholders, and interveners have raised substantive environmental concerns during the scoping and application processes and that the EA was premature because the most of the environmental review is incomplete.

38. The Council on Environmental Quality (CEQ) regulations state that whether a project will have significant impacts on the environment depends on context and intensity. This means that the "significance of an action must be analyzed in several contexts," including "the affected region, the affected interest, and the locality." With respect to intensity, the CEQ regulations set forth 10 factors agencies should consider, including, as relevant here: the geographic area's unique characteristics; the degree to which the effects are highly controversial or highly uncertain or unknown; the degree to which the action might establish a precedent for future actions; whether the action is related to other actions with insignificant but cumulatively significant impacts; and the degree to which the action might adversely affect threatened and endangered species.

39. Regarding the project's context and intensity, the EA notes that the project is only 21 miles long, is largely within a right-of-way where there is an existing pipeline, avoids sensitive areas, and does not adversely affect any endangered species' critical habitat. No unique or sensitive vegetation communities were identified in the project area, and no part of the project will cross or come near designated Wilderness Areas, Wildlife Management Areas, National Wildlife Refuges, or other wildlife preservation areas; National Forests, Federal Parks, or other notable landmarks; National or State Scenic Byways; or lands with hazardous conditions (e.g., landfills or hazardous waste sites). The project will cross about 592 feet of Gunpowder Falls State Park near MP 11.6; however, the EA states that Columbia will adequately minimize impacts on the park by collocating the proposed pipeline with existing Line MA, temporarily affecting about 1.0 acre of park property and adding about 0.34 acres of permanent easement on park property.¹⁸ The construction right-of-way at this location overlaps Columbia's existing permanent right-of-way by about 25 feet. Overall, the Line MB Expansion is collocated with the existing Line MA for 16.5 miles, or 78 percent of the project's length. Moreover, the EA clearly and sufficiently describes the affected environment and protective measures for erosion and sedimentation control, restoration, and mitigation

¹⁸ EA at 65.

that Columbia must implement pursuant to the Environmental Conditions listed in Appendix B to this order.

40. For an action to be considered "highly controversial" under NEPA, there must be a "dispute over the size, nature or effect of the action, rather than the existence of opposition to it." A controversy does not exist merely because individuals or groups vigorously oppose, or have raised questions about, a project, nor does a controversy exist simply because there are conflicting views among experts. We find that the project does not qualify as "highly controversial" for the purposes of determining significance. The commenters' disagreement with this determination does not amount to a controversy requiring an EIS.

41. Consistent with CEQ regulations, the Commission's policy is to prepare an EA rather than an EIS if our initial review indicates that a project is not likely to be a major federal action significantly affecting the quality of the human environment. If, during the environmental analysis, it appears that this initial determination is incorrect, an EIS will be prepared. The EA thoroughly analyzed Columbia's project and identified no significant direct or indirect impacts. Therefore, the EA concludes that the Commission's approval of the project will not constitute a major federal action significantly affecting the quality of the human environment. We affirm the EA's finding and therefore reject Gunpowder Riverkeeper's assertion that an EIS is required.

Public Participation

42. Gunpowder Riverkeeper asserts that an EA of 325 pages¹⁹ subverts NEPA guidance and indicates the need for an EIS, and that the short public notice and scoping period of the "shortened procedure" and "abbreviated application" fail to allow robust public participation in addressing significant, potential cumulative impacts in light of the large number of affected citizens.

43. We disagree. The public has had numerous opportunities to comment on the project's potential impacts for over a year. Columbia began the pre-filing process to get early stakeholder involvement nine months before filing its application. Columbia has not requested or been given any special process or time line.²⁰ The EA describes opportunities for public involvement, including company-sponsored open house meetings, public scoping meetings, and several comment periods.²¹ The Commission's

²¹ EA at 5.

¹⁹ This figure includes appendices.

²⁰ Columbia used processes set forth in the Commission's regulations at 18 C.F.R. Sections 157.6-21 and Section 380.

electronic database, eLibrary, which contains all project documents, is available at all times, including nights, weekends, and holidays.²² Stakeholders have also been advised that they can request hard copies of the documents from the Commission or Columbia.

44. Gunpowder Riverkeeper states that the deadlines for many of the permits, approvals, consultations, and variances Columbia needs, which are listed in the EA's Table A.4-1, occur after the EA's public notice and comment period. Gunpowder Riverkeeper argues that the public is therefore excluded from meaningful participation because it cannot comment on issues and impacts that are unknown. The EA, however, provides adequate information regarding federal permits, including each permit's status. State and federal consultation on threatened and endangered species is concluded. Other plans, such as the stormwater management plan variances, county grading plans, and review of the county-required erosion and sediment control plans, are also available for public comment.

45. Consistent with our long-standing practice, an EA may be issued before all state and federal authorizations become final. The Commission's approach is a practical response to the reality that, in spite of the best efforts of those involved, an applicant might not be able to obtain all necessary approvals before the Commission issues an EA or certificate without unduly delaying the project. As noted in the EA, and included here as environmental condition 8, project construction cannot commence until Columbia receives all other necessary federal authorizations, including those delegated to the states. Section 7(e) of the NGA²³ permits the Commission to authorize natural gas projects subject to conditions that an applicant must satisfy before it may commence construction. The certificate authorizations granted herein are subject to Columbia's compliance with the environmental conditions in Appendix B and other conditions set forth in this order.

46. The Commission takes this approach to make timely decisions in a way that will inform applicants, sponsors, other regulatory agencies, and the public. Placing the Commission's administrative process on hold indefinitely until states with delegated federal authority act could delay in-service dates of natural gas projects to the detriment of consumers and the general public.

²² Public access to a very few of the documents is restricted due to their disclosure of confidential locations of cultural resources, historic artifacts, etc.

 $^{^{23}}$ Section 7(e) of the NGA grants the Commission the "power to attach to the issuance of the certificate and to the exercise of rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require." 15 U.S.C. § 717(f)(e) (2012).

Cumulative Impacts

47. The EPA asserts that the EA's cumulative impacts analysis should have included the apartment complex planned by the Grand Lodge of the Ancient Free and Accepted Masons (Masons) and several commercial and industrial structures described in the Land Use section of the EA.²⁴ We note that the EA does analyze potential construction impacts on the apartment complex and notes that Columbia is working with the Masons to resolve any outstanding concerns. The EA also notes that the primary temporary impacts on ongoing activities at existing commercial and industrial structures include traffic disruption. We acknowledge that if the Masons start construction of the apartment complex at the same time Columbia is constructing in this area, there would be temporary cumulative impacts on traffic and air quality. That, however, does not change our conclusion that, when the project's impacts are added to other identified projects' impacts, the anticipated cumulative impacts will be minimal.

48. The EPA contends that the conclusions under each resource area in the EA's cumulative impacts section contain insufficient support for the finding of no significant cumulative impacts. It states, for example, that while the EA identifies several pipeline projects (and several road and bridge projects) that are also likely to impact surface water quality, it does not analyze whether these projects' combined effects would cumulatively significantly harm surface waters and the aquatic habitat they support.

49. Gunpowder Riverkeeper similarly asserts that the EA fails to describe or analyze all relevant details and potential cumulative impacts resulting from the total acreage of land disturbed during construction, including the 20 sites that will be used for pipe storage yards, equipment, access roads, material storage, offices, vehicle parking, etc. For example, it contends that the EA fails to disclose the potential for cumulative impacts on prime farmland, forested areas, and high quality waterways, which excludes the public from meaningful comment.

50. The EA's Appendix 4 includes information about waterbodies that would be affected by staging areas and access roads (flow regime, traditionally navigable water connections, ordinary high water marks at crossings, stream designations, timing restrictions, and crossing methods). Except for one new permanent access road near the Rutledge Compressor Station, all other access roads that would be used during construction are existing roads that will require little or no modification.²⁵ Columbia will use erosion and sediment controls to prevent sedimentation to all wetlands and waterbodies along or near the project in accordance with its Environmental Construction Standards (ECS) and county-specific Erosion and Sediment Control Plans (ESCP). As

²⁵ EA at 42.

²⁴ EA at 61-62.

the EA states,²⁶ we have reviewed Columbia's ECS and found it to be consistent with the Commission's Upland Erosion Control, Revegetation, and Maintenance Plan (Plan) and Wetland and Waterbody Construction and Mitigation Procedures (Procedures). The EA appropriately concludes that project impacts, when added to impacts from other identified projects, will result in minimal cumulative impacts on surface waters and the aquatic resources they support.

51. While the overall project impacts the EA describes²⁷ include 305.4 acres of land, about 235 acres of the disturbance would occur on developed lands (commercial, residential, roads), open land/existing right-of-way, or agricultural land. Any cumulative impact on these land uses would be consistent with the existing/ongoing uses or would not be considered significant. Gunpowder Riverkeeper claims the project will affect acres of prime farmland soils. No prime farmland soils, however, will be lost by project construction or operation.²⁸ As the EA notes,²⁹ much of the prime farmland soils are within developed residential properties or within the existing Line MA right-of-way. About 27.3 acres of the affected land is agricultural, and will continue to be agricultural after construction; hence, there will be no cumulative impact on agriculture.

52. As the EA states, cumulative impacts on water resources and vegetation are possible, but any impacts would be minimal and localized because Columbia will use best management practices, engineering controls, and resource protection and mitigation plans to minimize or mitigate environmental impacts.

53. Regarding the EPA's request for clarification regarding noise impacts, we note that the EA's page 83 indicates that project construction will cause temporary, short-term noise impacts, but it will cause no operational noise impacts. Therefore, the EA concludes that cumulative noise impacts would be negligible.

Baseline Mitigation Measures

54. Gunpowder Riverkeeper contends that Columbia's ECS's proposal to "establish permanent erosion controls as needed" is not an enforceable mitigation measure because it is subjective. The Maryland DE states that the project should consider all Maryland Stormwater Management Controls, which require that site designs consider all environmental site design to the maximum extent practicable and "Green Building"

²⁶ EA at 9.

²⁷ EA at 18-19.

²⁸ EA at 30.

²⁹ EA at 56.

alternatives. The Maryland DE recommends designs that reduce impervious surfaces and encourages best management practices that increase runoff infiltration.

55. The measures in Columbia's ECS are performance-based, since, as the EA explains, ³⁰ Columbia designed the project to be consistent with federal, state, and county agencies' rules and regulations regarding construction and restoration in environmentally sensitive areas and its ECS adopts the requirements of the Commission's Plan and Procedures. Columbia's ECS (Appendix 2 to the EA) includes best management practices that Columbia is using to develop its project-specific ESCPs for each county. The ESCPs could include further recommendations from local soil conservation authorities or land management agencies for additional temporary and permanent erosion controls and revegetation specifications as needed. They will also include any other permit requirements, along with details help implementation.

56. Requirements of agencies with more stringent regulations will supersede those reflected in the ECS. Columbia will file the ESCPs with its Implementation Plan before commencing construction, as Appendix B's Environmental Condition 6 requires. The ECS also incorporates a Spill Prevention, Containment, and Countermeasures Plan (SPCC Plan). The establishment and maintenance of erosion controls are parts of the project and the resultant erosion controls is therefore enforceable.

57. Mr. Simon states that the project should have an onsite, full time, independent inspector at all times during construction. As the EA notes, pursuant to Columbia's compliance program,³¹ at least one environmental inspector will be assigned per construction spread. Further, the Commission's environmental staff or its contractor will inspect the project to monitor compliance with this order's Environmental Conditions during construction and restoration.

Hazardous and Contaminated Materials

58. The Maryland DE notes that any proposed activity or facilities that generate or handle hazardous wastes must comply with state and federal laws and regulations. It states that if there is asbestos in any structure that will be renovated or demolished, Columbia must contact the Community Environmental Services Program, Air and Radiation Management Administration to learn about the state's asbestos handling requirements. The EA notes that Columbia prepared a SPCC Plan to prevent, control,

³¹ EA at 18.

contain, and mitigate potential spills.³² Further, Columbia will not renovate or demolish any structures as part of this project.

59. The Maryland DE also notes that construction, renovation and/or demolition of buildings and roadways must comply with state regulations regarding "Particulate Matter from Materials Handling and Construction" (Code of Maryland Regulations [COMAR] 26.11.06.03D), which require reasonable precautions to prevent particulate matter, such as fugitive dust, from becoming airborne. As the EA notes, ³³ Columbia will control fugitive dust along the construction right-of-way by using water, calcium chloride, or other acceptable materials during dry conditions. Once construction is completed, fugitive dust and exhaust will subside.

60. The Maryland DE states that if there is soil contamination, Columbia must get a permit for soil remediation from the Maryland DE's Air and Radiation Management Administration. Further, Columbia must properly dispose of any solid waste that construction, demolition, and land clearing will create at a permitted facility, or recycle it. At this time, it is anticipated that neither the project's construction nor operation will disturb any known areas with contaminated soils or groundwater.³⁴ The EA states that Columbia must properly dispose of all cleared construction debris.³⁵

61. The Maryland DE states that any above- or below-ground petroleum storage tanks must be registered and installed in accordance with state regulations. It also states concerns regarding lead paint abatement in properties built before 1950 that will be used for rental housing, and notes that no cutback asphalt should be used during the months of June, July, and August. However, the project does not include underground storage tanks, demolishing structures, or rental properties. At this time, asphalt has not been identified as a construction material for the project. Moreover, Columbia states that it will comply with all state and local permit requirements.

62. The Maryland DE states that the project must be concentrated in suitable areas, such as existing or planned population centers, consistent with a county's comprehensive plan. Columbia's Line MB will be located next to its existing Line MA, with minor deviations to avoid features and resources. We note that both Harford and Baltimore Counties state that the project is generally consistent with their plans,

³³ EA at 80.

³⁴ EA at 33 and 47.

³⁵ EA at 11.

³² EA at 35 and 40.

programs, and objectives. Our analysis³⁶ indicates that, with appropriate mitigation, constructing and operating the project will not cause significant impacts.

Waterbody Crossing Methods

63. The EPA, the Maryland DNR, Trout Unlimited, Gunpowder Riverkeeper, the Army Corps of Engineers, and Mr. Simon favor horizontal directional drilling (HDD) for some or all of the waterbody crossings over Columbia's proposed open cut, dry-ditch waterbody crossing method, ³⁷ citing potential negative impacts on water supply, vegetation, fish, and wildlife. The EPA states that the open cut construction method requires excavating streambeds and banks, removing riparian vegetation, and disturbing ecosystems, resulting in the potential to jeopardize sensitive aquatic resources. The EPA supports the FWS's and the Maryland DNR's recommendations to use HDD or other boring construction methods. Trout Unlimited states that trenching adds considerable downstream sediment, and Mr. Simon states that Columbia's proposed method is the most intrusive and least safe.

64. The Maryland DNR identifies waterbodies that have certain high quality characteristics regarding habitat and the presence of brook or brown trout, notes their cumulative significance as part of a trout stream complex, and requests that the Commission reconsider the EA's evaluation of waterbody crossing methods at those sensitive areas.³⁸ The Maryland DNR disagrees with the EA's conclusion that HDD's benefits are outweighed by its need for larger workspaces, longer construction schedules, and increased noise, traffic, and costs. The Maryland DNR recommends that the Commission require Columbia to conduct a more thorough and detailed analysis of both temporary and permanent impacts and to use HDD. Gunpowder Riverkeeper likewise states that the EA dismissed HDD because of its short-term residential impacts, despite the Army Corps of Engineers' recommendation to investigate using HDD at certain crossings. Gunpowder Riverkeeper states that HDD would have less of a long-term environmental impact.

65. The EA concurs with the conclusion of Columbia's HDD analysis of six waterbody crossings, done at the request of the Maryland DE and the Army Corps of

³⁶ EA at 136.

³⁷ As the EA notes at 93, a dry-ditch crossing involves isolating the construction work area from the stream flow by directing water though a flume pipe (flume crossing) or by damming and pumping the water around the construction area (dam and pump crossing). These methods' primary objectives are to minimize siltation and allow for a longer construction period (than wet-ditch crossings) without affecting the waterbody.

³⁸ EA at 38.

Engineers during site visits in the spring of 2012, which revealed no measurable benefit for HDD over the proposed dry-ditch method.³⁹ As indicated in the "Trout Impact Analysis" Columbia filed on June 1, 2013, the proposed method's anticipated impacts on trout, streambeds, macroinvertabrates, habitat structures, and sedimentation will not be significant and will be mitigated by using proven construction techniques, following in-stream construction timing restrictions, and using appropriate erosion and sediment control measures. Columbia also notes that a study by Reid *et al.*⁴⁰ indicates that the proposed stream crossing method causes no long-term (>1 year) changes to benthic invertebrate or fish communities because it limits waterbody sediment release and associated risks to fish and their habitats during construction.

66. Moreover, at waterbodies with an ordinary high water mark over 10 feet wide, Columbia proposes to: (1) photograph habitat structures that require removal, such as logs and debris jams, (2) remove, segregate, and store them, along with the native stream-bottom material, and (3) return them to the stream channel using the preconstruction photographs as reference. Columbia will live-stake stream banks with native vegetation pursuant to the county-approved Forest Conservation Plan and Forest Conservation Plan/Forest Buffer Protection Plan to help overhanging vegetation return. Columbia also states that, in compliance with Maryland's Forest Conservation Act, it is consulting Harford County, Baltimore County, and the Maryland DNR to identify and mitigate additional temporary and permanent forest impacts, including impacts near the waterbody crossings.

67. While Columbia has not proposed HDD, Columbia is still consulting the Army Corps of Engineers, the Maryland DE, and the Maryland DNR about using HDD at specific waterbody crossings. The Army Corps of Engineers states that, in consultation with the Maryland DNR and the Maryland DE, it is currently evaluating the practicability of trenchless construction (e.g., HDD) at several crossing locations and that the Clean Water Act's Section 404 probably requires HDD at certain streams/wetlands. Thus, although Columbia's proposed waterbody crossing and mitigation plans are consistent with our policies, the Army Corps of Engineers and the Maryland DE might require additional measures. If these agencies require Columbia to complete certain waterbody/wetland crossings using HDD, Columbia must file a variance request, pursuant to Appendix B's Environmental Condition 1. The

³⁹ EA at 38 and 43.

⁴⁰ S. M. Reid, S. Metikosh, T. Huffman, and J. Evans, *Effects of Natural Gas Pipeline Water Crossing Replacement on the Benthic Invertebrates and Fish Communities of Big Darby Creek, Ohio, in* 7th International Symposium on Environmental Concerns in ROW Management, Calgary, Alberta 717-23 (Elsevier Science, 2002).

Commission's environmental staff will review such a request before approving construction commencement.

68. Gunpowder Riverkeeper also states that the EA's Appendix 4 is not sufficiently informative because it fails to indicate the specific dry-ditch waterbody crossing method Columbia proposes to use. We note that there are two dry-ditch methods described in the EA: the flume method and the dam and pump method. At the time the EA was issued, Columbia had not determined which specific kind of dry-ditch method it will use at each waterbody. Columbia's compliance with the Commission's procedures, however, will ensure that it minimizes impacts to the maximum extent practicable regardless of which method Columbia selects.

Surface Water Quality

69. The Maryland DE notes that Clean Water Act (CWA) Section 303(d) requires states to identify impaired waters and establish Total Maximum Daily Loads (TMDL) for the substances causing impairments. It states that, since the project is in the Gwynns Falls, Jones Falls, and Loch Raven Reservoir watersheds, each of which has been identified as impaired by several substances,⁴¹ the project must avoid increasing the impairing substances, consistent with the applicable TMDLs.

70. Gunpowder Riverkeeper states the project could further degrade Section 303(d)listed downstream waters during both construction and operation. It contends that the EA ignores these potential impacts and fails to link phosphorus and sediment impairments in Lock Raven Reservoir with downstream construction impacts. Gunpowder Riverkeeper also contends that the EA fails to provide a thorough analysis of how a dry-ditch construction method will cumulatively impact (both in the short and long term) the 303(d)-listed reservoir, which provides drinking water for 1.8 million Baltimore metro area residents. It further claims that the EA provides no evidence of communication with the Baltimore City Department of Public Works related to unanticipated releases of water from Prettyboy Reservoir, which, it argues, could affect the safety and integrity of the pipeline's Gunpowder River crossing.

71. Gunpowder Riverkeeper contends that the EA fails to plan for comprehensive water quality monitoring to protect water supply during construction. Gunpowder Riverkeeper argues that the EA provides only a cursory characterization of Lock Raven Reservoir, which is currently subject to TMDL for sediment and phosphorus, and

⁴¹ The currently identified impairments for Gwynns Falls are bacteria, sediments, and chlorides (a TMDL is pending for chlorides); for Jones Falls are toxins (pending TMDL for polychlorinated biphenyls for Lake Roland and established there for chlordane), bacteria, sediments, and biologicals (pending TMDL); and for Loch Raven Reservoir are mercury, bacteria, sediments, nutrients, and biologicals (pending TMDL).

nothing about potential pipeline ruptures and releasing hydrocarbons into high quality tributaries and the main stem of the Gunpowder River, which supply Lock Raven Reservoir with most of Baltimore's drinking water.

72. As the EA notes,⁴² pursuant to CWA Section 401 and Appendix B's Environmental Condition 8, Columbia must file a state-issued certification that the project complies with the established Maryland DE water quality standards developed to protect designated uses assigned to streams and rivers (e.g. potable water, recreation, and fishing) before the Commission issues a Notice to Proceed with construction. We also note that the Maryland DE is the state agency authorized to grant or deny Columbia's Joint Permit Application.⁴³ Before beginning construction, Columbia must also have county-approved ESCPs that implement state requirements for maintaining water quality pursuant to the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. Therefore, we do not anticipate water quality degradation in waterbodies that the project crosses.

73. As previously noted, dry-ditch methods are preferred for crossing sensitive aquatic habitats and have little to no impacts on downstream Total Suspended Solids (TSS) concentrations and turbidity. Impacts have been brief and only during dam installation and removal (for dam and pump crossings). Columbia notes that Moyer and Hyer⁴⁴ continuously monitored turbidity to assess the effects of pipeline installation via a dam and flume technique in Virginia and concluded that turbidity 65 feet downstream of a pipeline crossing did not change adversely during construction. Columbia also notes that Reid, *et al.*⁴⁵ studied pipeline stream-crossing techniques' effectiveness in mitigating sedimentation and found that TSS concentrations were equal to background measurements 40 meters downstream of a dry-ditch crossing. Increases to downstream TSS concentrations during dry-ditch crossings were at least seven times lower than during wet-ditch pipeline crossings⁴⁶ of similar-sized watercourses. Downstream TSS

⁴² EA at 35.

⁴³ Under Environmental Article Title 5, Subtitle 5-901 through 5-911; COMAR 26.213.

⁴⁴ D. L. Moyer and K. E. Hyer, *Continuous Turbidity Monitoring in the Indian Creek Watershed, Tazewell County, Virginia, 2006–08, U.S. Geological Survey Scientific Investigations Report (2009).*

⁴⁵ S. M. Reid, S. Stoklosar, S. Metikosh, and J. Evans, *Effectiveness of Isolated Pipeline Crossing Techniques to Mitigate Sediment Impacts on Brook Trout Streams*, Water Quality Research Journal of Canada, v. 2, no. 2, 473–88 (2002).

⁴⁶ Wet-ditch crossing methods entail trenching directly through the waterbody.

concentrations returned to background levels within one hour of completion of in-stream activity. Columbia further explains that it will use turbidity curtains to reduce potential sedimentation and turbidity increases during construction if needed.

74. Further, Columbia will prohibit construction equipment from being parked, refueled, stored, or serviced within 100 feet of any waterbody, pond, wetland, spring, or seep area. An inspector will check all equipment for leaks before construction commences in waterbodies or wetlands. Columbia will comply with the mitigation measures in the Commission's Procedures. Additionally, Columbia will use specialized erosion and sediment control best management practices at waterbody crossings with special Maryland DE and Maryland DNR designations.

75. Columbia states it will ask the Baltimore Department of Public Works' Reservoir Natural Resources Section about Prettyboy Reservoir releases before beginning instream activities so no releases will occur during in-stream construction. Regarding Gunpowder Riverkeeper's concern about releasing hydrocarbons into waterbodies, we note that the project will transport natural gas, which is lighter than air. If an unlikely pipeline rupture occurs, the gas would dissipate into the air – it would not sink down into the ground or into waterbodies.

76. The Maryland DE also notes that Maryland has "anti-degradation policies" for high quality waters (Tier II waters),⁴⁷ which state that "proposed amendments to county plans or discharge permits for discharge into Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." The Maryland DE further notes that Current Antidegradation Procedures apply to all land-disturbing projects that do not implement a no-discharge alternative and might adversely affect Tier II waters.⁴⁸

77. Gunpowder Riverkeeper argues that the EA is not sufficiently informative because it contains only a cursory review of the state water designations, tier classifications, and water quality standards. It argues that the EA fails to identify the Gunpowder Watershed and Little Gunpowder Falls as Tier II watersheds, indicate the designated uses (drinking water supply) of waterways the project will affect, or discuss Maryland water quality standards and temperature limitations used to protect coldwater resources.

⁴⁸ As COMAR 26.08.02.04-1(K)(2) and its 2007 Stormwater Manual currently require.

⁴⁷ The regulations pertaining to Tier II waters are in COMAR 26.08.02.04.

78. The EA's appendix lists the designated uses of all waterbodies the project crosses as defined by Maryland. The project only crosses Tier I stream segments; it does not cross any Tier II segments. There are 13 waterbodies (three ephemeral, three intermittent, and seven perennial) along the project that are in Tier II catchment areas or watersheds, meaning that a Tier II stream segment is further downstream. In addition to its proposed measures to limit water quality impacts, as the EA describes, Columbia is cooperating with the Maryland DE regarding additional minimization measures at stream crossings in Tier II catchment areas.

Hydrostatic Testing and Pipe Coating

79. Gunpowder Riverkeeper contends that Columbia's Hydrostatic Testing Plan will not adequately protect local water quality and that the EA fails to consider the localized hydrostatic fluids discharges' impacts on wetlands and the adjacent and downstream state-classified or special status waterbodies that are subject to anti-degradation statutes. Gunpowder Riverkeeper further claims that pipeline residue might add pollutants to the discharge water. Although new pipelines should be relatively free of potential pollutants, Gunpowder Riverkeeper asserts that they might contain construction debris, suspended solids from soil, welding solids, lubricating oils, and adversely affect pH levels.

80. Gunpowder Riverkeeper also claims that Columbia plans to de-chlorinate discharge water with sodium bisulfite, which is a listed hazardous material. Gunpowder Riverkeeper contends that Columbia's discharge water release strategy does not accurately evaluate factors peer publications address. Gunpowder Riverkeeper argues that improper hydrostatic water discharges could adversely affect fish and their habitat and that poorly-controlled test water discharge could cause bank erosion, substrate scouring, or downstream flooding. Gunpowder Riverkeeper also asserts that the EA does not address how on-site pipeline coating might affect the immediate environment.

81. Columbia applied for a Maryland DE National Pollutant Discharge Elimination System (NPDES) General Permit for discharges and will comply with permit requirements. As the EA notes,⁴⁹ Columbia will pressure-test the pipeline before putting it into service by filling it with water and over-pressurizing it for a specified time. Municipal water supply sources (as opposed to surface water or groundwater) would supply, at most, about 3.17 million gallons of water for hydrostatic testing.⁵⁰ Afterwards, Columbia would discharge the test water to the ground surface in well-vegetated upland areas in accordance with an approved Maryland DE permit, Columbia's ECS, and the county-specific ESCPs. Accordingly, the EA concludes that

⁴⁹ EA at 11 and 41.

⁵⁰ The EA indicates 2.91 million gallons of water at 41.

Columbia's ECS and ESCP, and the Commission's Procedures, will adequately protect the environment during hydrostatic test discharges.

82. The EA describes pipe coating.⁵¹ In Columbia's response to comments on the EA it further explains that pipe is typically coated with a fusion bond epoxy at a coating mill, not on the construction right-of-way. When a weld is prepared, however, the area around the weld is sandblasted; the epoxy coating is then reapplied to the welded pipe section by hand in the field, and a tarp is placed under the pipe where the epoxy is being reapplied to catch any accidental spills. Because pipe segments are normally prepared and welded in uplands before they are installed in waterbodies, coating is not typically applied within waterbodies or wetlands unless unavoidable. This is a standard industry procedure that does not harm environmental resources if companies adhere to an SPCC Plan.

Thermal Degradation

83. Gunpowder Riverkeeper states that the EA fails to identify cumulative temporary and permanent loss of forest and buffers that control stormwater control and provide shade. Gunpowder Riverkeeper also states that the EA should address resulting thermal degradation of Little Gunpowder Falls and four unnamed upstream tributaries.

84. Columbia states that it will plant native shrubs along the stream banks of the temporary and permanent rights-of-way to accelerate shade restoration to all intermittent and perennial steams along the project, as described in Columbia's Forest Conservation Plans submitted to both Harford and Baltimore Counties. Columbia will also re-plant forest buffers within the temporary right-of-way along all intermittent and perennial Baltimore County streams. In Harford County, the forest buffers will be allowed to revert back to forest.

85. The segment of Little Gunpowder Falls the project will cross is not a designated Tier II waterway; it is a Tier II catchment -- the Tier II segment is about 1.5 miles downstream. Columbia states, however, that it is working with staff at the Maryland DE to determine whether additional enhanced minimization measures are appropriate for this and the other crossings. It will need only minimal tree clearing at the Little Gunpowder Falls crossing because the area is fairly open and abuts active farmland. Likewise, the project will cross two of the four unnamed tributaries to Little Gunpowder Falls (upstream of the Little Gunpowder Falls crossing) in areas where there is currently no tree shade due to the abutting farmland. The remaining two tributary crossings, which are further upstream of the Little Gunpowder Falls crossing, will need temporary and permanent tree clearing; Columbia, however, will plant native shrubs shortly after

⁵¹ EA at 10.

the crossing is complete to mitigate the loss of shade. Columbia's proposed mitigation measures will facilitate restoration of waterbodies and forest buffers.

Environmental Justice

86. Gunpowder Riverkeeper claims that there are substantive environmental justice concerns related to the lack of public participation, downstream drinking water supply impacts, and inadequate analysis of minorities because everyone who gets water from public sources, such as Loch Raven Reservoir, was not notified.

87. As the EA discusses,⁵² with Columbia's proposed mitigation measures, the project's construction and operation will not significantly impact urban or residential areas. In addition, no disproportionately high adverse human health or environmental impacts on minority and low-income communities or Native American groups have been identified. The EA concludes that implementing Columbia's ECS will ensure that the project will not affect downstream drinking water supplies. Gunpowder Riverkeeper fails to provide information that would change that conclusion.

Threatened and Endangered Bog Turtle

88. Gunpowder Riverkeeper stated that there is insufficient data regarding impacts on threatened and endangered bog turtles and requested further study. The EA's environmental recommendation 13 pertained to interagency consultations regarding the bog turtle. After the EA was issued, however, Columbia completed the Supplemental Bog Turtle Survey Report and, upon review, the FWS and the Maryland DNR concur that the project will not affect bog turtles because there is no evidence of bog turtles in the subject wetland areas.⁵³ We also concur that the project is not likely to adversely

⁵² EA at 72.

⁵³ In a June 3, 2013 letter, FWS reports that it has finished its review of Columbia's Supplemental Bog Turtle Survey Report (Supplemental Report). It states that the report provides complete survey results for three wetlands where survey protocol had not yet been met when Columbia submitted its bog turtle survey report in October 2012. The FWS states that its "survey protocol has been met and no bog turtles or evidence of bog turtles was found at any of the wetlands providing potential bog turtle habitat, we concur with your conclusion that implementation of the proposed project is not likely to adversely affect the threatened bog turtle. Therefore, no further Section 7 consultation is required regarding the Line MB Extension Project in Maryland." In a May 28, 2013 letter, the Maryland DNR, Wildlife & Heritage Services, states that it has reviewed the Supplemental Report, notes that the Phase II survey for bog turtles was conducted according the FWS and Maryland DNR survey protocols, and accepts the conclusion of "probable absence of bog turtle."

affect bog turtles. Since consultation with the FWS about federally listed threatened or endangered species for this project has concluded, environmental recommendation 13 is not included in Appendix B as an environmental condition to this order.

Invasive Species

89. The Maryland DNR requests that the Commission condition approval of the project such that no in-stream construction or construction in riparian buffers, including movement of vehicles, may begin until the Maryland DNR reviews and approves Columbia's didymo control plan. ⁵⁴ Gunpowder Riverkeeper states that without an approved control plan, didymo might spread to all high quality waterways along the project through shared construction equipment that contacts the Gunpowder Falls River.

90. Columbia submitted its didymo control plan to the Maryland DNR on June 3, 2013, after the EA was issued. Columbia states that it will not begin construction until the Maryland DNR approves an invasive species plan. Although our review and approval of the didymo control plan is not required, the EA notes that Columbia will file it with the Commission when it is finalized.

Public and Private Water Wells

91. Harford County claims that the residential construction plans in the EA are insufficient in number and detail for the Harford County Bureau of Environmental Health to determine the project's impact on water wells. Woodsbrook Martino contends that a few wells are so close they risk being damaged during the pipeline installation and many more risk being contaminated, including any well within 100 feet, or wells that are farther away but downslope of the pipeline. Woodsbrook Martino states that there are a dozen wells in the Woodsbrook and Bakersfield communities within the pipeline's impact zone, like the Tedeschi's well, which is 10 feet from the pipeline. The Scherrs are also concerned about possible impacts to their water well, which is about five feet from the construction right-of-way. Woodsbrook Martino contends that installing the pipeline in a five-foot deep trench and backfilling it with materials that are less compact than the surrounding undisturbed material might create a channel along the bottom of the trench that water would travel through rather than seeping downward. They assert that this could cause well and surface water contamination if contaminated materials move through the trench. They also state that, while a contaminated well can frequently be repaired by dosing with chlorine and flushing, this only works if the source of contamination is not continuous. They state that if a well were contaminated by a continuous source, like septic system effluent, or physically damaged, a new well would have to be drilled since the public water supply is 10 miles away.

⁵⁴ Didymo (Didymosphenia geminata) is an invasive species in the Gunpowder Falls River.

92. Columbia states that Maryland regulations do not require pipelines to be at least 100 feet from water wells; rather, the regulation at issue restricts siting a drinking water well within 100 feet of an "identifiable source of contamination."⁵⁵ Columbia argues that the regulation addresses, not pipeline siting, but well siting, and is therefore inapplicable to the project.

93. There is no record evidence that Columbia's proposed pipeline would be a source of contamination. The project will transport natural gas, a non-visible, odorless, and buoyant gas which, if released, would float up into the air -- not sink down to contaminate the water table. In any event, as the EA notes, Columbia will test any water wells within 150 feet of a construction work area at the landowners' requests before and after construction. To date, Columbia has identified only one well (on the Tedeschi property) within the construction workspace, which it will protect during construction. Three other wells in the environmental survey corridor are not in the construction workspace, and Columbia asserts that constructing the project is unlikely to damage them. Columbia also notes it has prevented migrations of various materials (such as, but not limited to, water from adjacent wetlands or waterbodies or underground seeps) by creating a barrier, a ditch breaker, around the pipeline at these areas' entrance and exit, as needed, for previous pipeline projects.

94. Harford County asks what Columbia will do about affected wells that do not meet minimum setback standards. It asserts that if a well needs to be replaced after construction, setback restrictions might prevent replacement of the well. Woodsbrook Martino states that drillers have found it challenging to find locations where new wells will meet minimum standards because of soil and geologic conditions and setback requirements, so drilling a replacement well might not be possible. Columbia states that Woodsbrook Martino provides no documentation to support this statement, arguing that since all the houses in Woodsbrook and Bakersfield get water from private wells, which must meet the minimum standards, the soil conditions, subsurface geology, and groundwater source must ultimately have been sufficient to enable the standards to be met.

95. Some landowners, including the Tedeschis and the Mickels, state that their wells are not listed in the EA's Appendix 3 or that their wells' listed distances from the project are incorrect. Data might be missing because of Columbia's inability to gain access to survey well locations. We note, however, that pursuant to Environmental Condition 12, Columbia must finalize its well location survey and file it with the Commission before commencing construction. Environmental Condition 12 also requires Columbia to file a

⁵⁵ Maryland Code Regulation 26.04.04.05, B (2), (a) states: "A proposed well location shall satisfy the following minimum distance requirements: (iv) If the proposed well will utilize an unconfined aquifer as a water supply source, 100 feet from identifiable sources of contamination and designated subsurface disposal area."

report addressing any complaints about water well yield or quality and how each complaint was resolved. Harford County concurs with that requirement and recommends that any water well testing adhere to a State of Maryland Certified Laboratory. Regarding Harford County's recommendation that the report be filed with the "Approving Authority" rather than the "Secretary," however, we note that requirements for filing documents state that all filings be made with the Secretary.

96. We agree with the EA's conclusion that the project is not likely to significantly impact water wells. As noted previously, pursuant to the environmental conditions appended to this order, Columbia will test at-risk wells pre- and post-construction. Further, Columbia will be responsible for replacing or repairing damaged wells, and for providing a temporary water supply as needed.

Septic Systems and Septic Reserve Areas

97. We received many comments regarding impacts of constructing the project on (1) residential septic systems and (2) septic reserve areas (SRAs), particularly in Harford County. A septic system comprises physical components (tank, piping, drains, etc.) that process household sewage. An SRA is the area on a property that is reserved for the septic system, including space for a replacement septic system if the current system fails. Thus, septic system components might not be currently located throughout an entire SRA. In Harford County, SRAs must be at least 20,000 square feet in areas where no public water is planned for the next ten years.

Impacts on Septic Systems

98. The Maryland DEP states that the project will affect residential septic systems. The Tedeschis note that the pipeline will cross their property where their septic tank and drain tiles are located. The Tedeschis and Woodsbrook Martino are concerned that heavy equipment operating over septic systems might compress soils, adversely affecting drainage. The Tedeschis ask that Columbia provide firm commitments to prevent drainage problems that soil compaction might cause. Woodsbrook Martino states that 10 of the 21 affected septic systems are in Woodsbrook and Bakersfield and argues that Columbia and the EA wrongly assume that damage to septic systems or SRAs must meet several criteria regarding percolation rate, depth of the water table, and distance from bedrock. Woodsbrook Martino states that a U.S. Department of Agriculture Web Soil Survey map indicates that the suitability of a large part of Woodsbrook and Bakersfield soils is "Very Limited" and that the suitability for the rest of the area is "Somewhat Limited."

99. Columbia states that Woodsbrook Martino misinterprets Columbia's data. Columbia states that the "ten septic systems" Woodsbrook Martino mentions are not septic systems, but SRAs. The EA's Table 2.1-2, which was included with Columbia's January 11, 2013 Supplemental Filing Report, identifies wells and septic systems in the environmental survey corridor, including five septic systems in Woodsbrook and Bakersfield. Only one of these septic systems, however, extends into the proposed workspace. Survey information places it 36 feet north of the pipeline centerline, with some of the septic system laterals extending about 14 feet into the temporary workspace.⁵⁶ As part of a settlement with this landowner, Columbia will use a 1-inch steel plate, an earthen mound, or equivalent to protect components that are in the construction workspace. Columbia will test the septic system before and after construction to confirm that construction activity did not damage it.

100. The EA notes that Columbia identified a total of 21 septic systems, 13 septic system cleanouts, and four septic tank caps near the project, noting that seven of these facilities might be in the construction right-of-way. The EA accepts Columbia's plan to assess damage to septic systems and to repair them if they are damaged. We note that while damage to septic systems in project corridors is generally avoidable, if Columbia damages such systems, it is responsible for working with landowners and county agencies to replace them at Columbia's expense. ⁵⁷ The EA also notes that heavy construction equipment could cause compaction of finer-grained soils. No soils affected by the project, however, have high compaction potential. ⁵⁸ We agree with the EA's conclusion that Columbia will protect construction activities from significantly affecting residential septic systems and mitigate any damage.

101. As previously mentioned, Woodsbrook Martino asserts that septic effluent could enter the pipeline trench and travel to nearby wells or contaminate surface waters because septic effluent can travel long distances through soil, which, they contend, is why Harford County prohibits placing a pipeline within 100 feet of a well. Columbia disagrees that the project could cause septic effluent to move through the trench to nearby wells or surface waters because only one set of septic system drains is in a construction area and those drains will not be bisected by the trench. Columbia notes that, in any event, Columbia's agreement with the affected landowner would mitigate any damage. To prevent any inadvertent septic effluent migration, Columbia will consider installing ditch breakers in trenches at each end of any bisected SRAs before backfilling those trenches. With this commitment, we concur that the project is not likely to cause migration of septic effluent to wells.

⁵⁸ EA at 30.

⁵⁶ This septic system is not on the Tedeschi property; the project will cross the Tedeschi's SRA, but not their septic system.

⁵⁷ EA at 34.

Impacts on Septic Reserve Areas

102. Several parties, including Harford County and State Senator Barry Glassman, are concerned that project construction and operation could reduce SRAs to below the county-required minimum area and question whether Columbia can restore damaged SRAs to the 20,000 square foot minimum. The Bierers state that the project will disturb about one third of the land in their SRA. Woodsbrook Martino worries that if a homeowner's SRA is reduced to less than 20,000 square feet, the home might become worthless or be condemned, noting that the nearest sewer line is more than 10 miles away.

103. The EA notes that a 20,000 square foot SRA can accommodate an initial septic system and two replacement systems.⁵⁹ The EA also notes that Columbia is coordinating with county agencies and landowners to identify all SRAs the project will cross.⁶⁰ Columbia states that none of those SRAs will be reduced to less than 25,165 square feet, which is over 25 percent more than the county minimum. In Harford County, landowners must request a reduction in existing SRA size (due to the presence of a pipeline) by re-filing a plat with the reduced reserve area. Columbia states that the Harford County Bureau of Environmental Health will let Columbia submit reduction requests and accompanying plats with the approval of the respective landowners; if landowner cooperation is not forthcoming, Columbia may submit the information and note attempts to obtain landowner cooperation. Columbia states that one out of the four affected landowners has cooperated in this process. We note that while Columbia provided draft site-specific plans of the SRAs on the four affected properties, the plats with the revised SRAs have not been re-filed and approved by Harford County. All properties with SRAs that require county approvals are in Phase 1 of the project. Accordingly, Environmental Condition 17 requires Columbia to file documentation showing that the plats with adjusted septic reserve areas have been re-filed with and approved by Harford County before commencing construction of Phase 1.

104. Because many landowners are concerned that the project will damage their properties, we will require Columbia to develop and implement an environmental complaint resolution procedure pursuant to Environmental Condition 11. The procedure will give landowners clear and simple directions for identifying and resolving environmental mitigation concerns during project construction and right-of-way restoration. Before commencing construction, Columbia must mail the procedures to each landowner whose property the project will cross.

⁶⁰ EA at 35.

⁵⁹ EA at 34 - 35.

Oregon Ridge Nature Center and Park

105. The Oregon Ridge Nature Center Council, Inc. (Council) notes that the project will cross into the Oregon Ridge Nature Center and Park (Oregon Ridge), which the Baltimore County Department of Recreation and Parks (Baltimore County DRP) owns an operates. The Council complains that Columbia did not consult it even though the project will remove 11 acres of mature hardwood forest. Rather than planting seedlings to replace the mature trees, the Council asserts that Columbia should buy 11 acres of land to add to the park. The Council is also concerned about impacts on brook trout and yellow-spotted salamanders in a wetland near MP 7.6 and on the public swimming and canoeing area at the abandoned iron ore mine,⁶¹ which is about 11 yards downgrade from the pipeline. The Council also states that the project construction might affect activities and attendance at events at the Nature Center and other areas of the park, like festivals and summer camp, due to trail closures, noise, and dust.

106. Columbia states that it has been working with the Oregon Ridge managing agency, the Baltimore County DRP, which, it states, was appropriate because that agency has legal authority over the park. Columbia developed a revegetation plan that includes replanting trees in disturbed areas outside the permanent right-of-way and collaborating with the agency to enhance areas of the park beyond the project construction areas, ⁶² but not acquiring more land. Columbia must control erosion and sedimentation, which will minimize the potential impacts on water quality in the ore mine reservoir and on brook trout and salamanders. Since the project will cross the park next to the existing Line MA, it will not create a new corridor, thereby minimizing impacts. Columbia will use stove pipe construction or mini-crews to minimize impacts in some areas, including trails. As the EA notes, ⁶³ Columbia will continue to consult with the Baltimore County DRP on how to further reduce impacts (including keeping trails open, especially during peak season) during construction. We further note that Environmental Condition 15 requires Columbia to file its final mitigation plan for the park before commencing construction.

Access and Easements

107. The Boyces, O'Loughlins, and Mr. Rocker express concerns about easement agreements and/or impacts on property values. Woodsbrook and Bakersfield state that Maryland law does not allow access for surveys until after a private corporation receives eminent domain authority. As the EA notes, issues related to condemnation, easement

⁶¹ EA at 28.

⁶² EA at 64.

⁶³ EA at 64.

agreements, or enforcement of state or local laws regarding trespass are beyond this proceeding's scope, which, as stated previously, is to determine whether the proposed project is required by the public convenience and necessity. As the EA also notes, however, Columbia's ECS will ensure that it restores and re-vegetates affected properties, which will minimize property value impacts, and Columbia will compensate landowners for damages like tree loss.⁶⁴

Public Safety

108. Woodsbrook Martino states that it is unsafe to site pipelines within 10 feet of homes. The Boyces, Tedeschis, and O'Loughlins have similar safety concerns. We note that pipelines are constructed and operated in accordance with DOT regulations, which address safety and construction near structures, and do not prohibit pipeline placement within 10 feet of any structure. As the EA notes,⁶⁵ Columbia will construct and operate the project in compliance with the DOT regulations, which will ensure pipeline safety near homes.

109. Mr. Rocker states that lightning striking a power line transformer near the pipeline might cause an explosion and that stray currents from underground electric lines can damage a pipeline over time. We note that pipeline companies work with electric utilities to address potential issues related to facilities located near each other, including the grounding of facilities, as needed. As the EA also describes, ⁶⁶ Columbia will significantly reduce the corrosion rate of the pipe by using both an external protective coating and a cathodic protection system, which DOT requires for all pipelines installed after July 1971.

110. We further note, that, pursuant to Title 49, U.S.C. Chapter 601, the DOT's PHMSA develops safety regulations and other approaches to risk management that ensure safety in the design, construction, testing, operation, maintenance, and emergency response of pipeline facilities transporting natural gas or other hazardous materials. Columbia will maintain operating policies and procedures that the DOT periodically reviews, including periodic training sessions and review of operating and emergency procedures for affected operations employees. Compliance with the DOT regulations during project construction and operation should address these safety issues.

⁶⁶ EA at 89.

⁶⁴ EA at 60-61.

⁶⁵ EA at 83-92.

Site-specific Landscaping and Residential Plans

111. Mr. Raymond states that he has not received a plan for repairing the landscaping on his property, although he has met with Columbia. Columbia explains that it is reviewing the landscaping plan. We note that Columbia will complete landscape restoration in accordance with individual easement agreements between Columbia and the property owners.

112. Columbia states that it has adjusted the four site-specific residential plans listed in Table B.6-4 of the EA, which found that Columbia must increase the separation between the homes and the construction workspaces. We find that Columbia's proposed revisions to these plans will appropriately address the EA's findings. Pursuant to Environmental Condition 18, Columbia must file revised site-specific drawings for those four sites before commencing construction.

113. Ms. Wilhelm contends that her property and a BG&E line next to her property are not accurately shown on the site-specific plan (Drawing Number TB-6526-8817) included in the EA's Appendix 7. She states the project workspace will be within 11 feet of her home. She states that a 25-foot-wide permanent easement and an additional 25-foot-wide temporary construction easement would be adequate to install and operate the pipeline on her property because BG&E installed its pipeline within a 40-foot-wide construction easement and has only a 20-foot-wide permanent easement near her property. She argues that the larger Columbia pipeline should only need an additional five feet of temporary workspace and permanent easement. She states that adopting a project-wide 50-foot-wide construction right-of-way and a 25-foot-wide permanent easement easement would reduce the environmental impact by 50 percent.

114. Columbia's 75-foot construction right-of-way and 50-foot permanent easement widths are typical widths used industry-wide to ensure safe working conditions and minimize encroachment on the pipeline. While we will not require Columbia to decrease the widths of these rights-of-way, Environmental Condition 18 requires Columbia to file a revised site-specific drawing that corrects the noted errors regarding the Wilhelm parcel.

115. Ms. Tedeschi states that her property is not included in the EA's Table B.6-4, which lists Site-Specific Residential Plans that Columbia must revise. The plan for her property, Drawing Number TB-6526-8875, shows that her home would be within nine feet of the construction right-of-way, which encompasses her entire driveway to the front door. Accordingly, Ms. Tedeschi is correct that her property should be considered as included with those listed in Table B.6-4 for revision. We also note that her water well is less than nine feet from the pipeline segment that will cross her property.⁶⁷

⁶⁷ The Tedeschis did not allow Columbia on their property to survey existing structures until after the EA was issued.

Environmental Condition 18 requires Columbia to file a revised site-specific plan that reflects a pipeline alignment that increases the distance between the pipeline and the well.

Greenhouse Gas and Emissions

116. The Chesapeake Climate Action Network and the Climate Change Initiative of Howard County (collectively referred to as the CCAN) requests analysis, not only of the project's impacts on greenhouse gas (GHG) and climate change, but also of the impacts of fugitive methane emissions from production fields and pipeline leaks throughout Columbia's entire system on GHG.

117. The EA finds that GHG emitted from project construction would be well below the 25,000-ton threshold the CEQ⁶⁸ established for requiring NEPA review.⁶⁹ We also note that Columbia partners with the EPA in the Natural Gas STAR Program, which identifies ways to reduce such emissions.

118. The EA notes that fugitive methane emissions are typically estimated as part of the operating emissions for projects that include compressor stations. Columbia's proposed project, however, does not include any new or modified compressor station equipment. We further note that while older pipelines might have higher leakage rates, leaks typically occur at valves, meter stations, and other mechanical couplers, rather than at pipeline faults caused by corrosion. The project will add 21 miles of new pipeline; however, leakage from new segments of pipeline is not a significant source of methane emissions. Moreover, before the gas to be transported on the project facilities reaches them, it may travel through many interconnected pipelines from various upstream production areas. We cannot determine where the gas will come from or how far it will travel before going through the proposed 21 miles of pipeline. Current estimates of leakage from segment of pipelines. Accordingly, we cannot predict the amount of methane leakage associated with transportation along a specific pipeline segment.

119. The CCAN contends that the EA's use of a global warming potential for methane over a 100-year period of 21 is incorrect because the Intergovernmental Panel on Climate Change has changed the value to 25. The Clean Air Act of 1970 and its amendments gives the EPA primary authority to implement and enforce regulations to reduce air pollution. The current EPA guidelines state that the accepted value for the global warming potential for methane is 21. After the EPA finalizes its March 8, 2013

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⁶⁸ Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, February 18, 2010.

proposal to change the global warming potential of methane from 21 to 25, the Commission will use the revised value.

120. The Maryland DE states that Columbia must apply for a permit to install emission-emitting equipment pursuant to COMAR 26.11.02. The Maryland DE also states that, since the project will be in a nonattainment area or maintenance area for ozone and carbon dioxide, Columbia must determine if emissions will exceed thresholds identified in the federal rule on general conformity. The EA notes that a general conformity determination is not required because the project's total direct and indirect emissions as a result would not exceed general conformity applicability thresholds.⁷⁰

<u>Alternatives</u>

121. The EPA states that the EA's alternatives analysis covers all requisite topics and thoroughly considers system and route alternatives. It supports the selected route, which avoids impacts on Gunpowder Falls State Park and which affects far fewer homes than any of the alternatives.

System Alternative

122. Mr. Simon suggests that Columbia use a combination of "hot-tapping" and "linestopping," two common pipeline procedures, as a system alternative to the proposed project. These methods are typically used as temporary measures for repairing or maintaining a pipeline section while maintaining flow, with bypass pipeline laid aboveground within additional temporary workspace. Because Columbia could safely and cost-effectively take only a limited pipeline length out of service using this method, however, Columbia could not accomplish its goal of increasing downstream customers' service reliability through system redundancy. Mr. Simon's proposed alternative would also limit the lengths of the existing Line MA that could be inspected using in-line inspection equipment pursuant to DOT requirements. Moreover, Mr. Simon's proposed alternative would not provide the other operational benefits previously noted (increased operational pressure near the Rutledge Compressor Station, mitigation of potential outages at the Loudoun Compressor Station, and increased flexibility for hourly service to Baltimore and District of Columbia markets), which also increase service reliability.

123. Mr. Simon also states that Columbia could build interconnections with Transcontinental Gas Pipe Line (Transco) so Columbia could divert gas into the Transco system, noting that there are several locations where the Columbia and Transco systems are within 1,500 feet of each other. As the EA notes,⁷¹ however, although Transco

⁷¹ EA at 100.

⁷⁰ EA at 80 - 81.

operates interstate pipelines near the project, it has no available firm capacity to transport the natural gas Columbia currently transports.

Route Alternatives

124. As described in the EA, Columbia's proposed route abuts its Line MA from MP 0.0 to a point near MP 16.5. At this point, it diverts from the existing pipeline corridor to its terminus at MP 21.1. Many commenters recommend alternatives to parts of the last 2.4-mile segment of Columbia's proposed route.⁷² That segment heads southeast from MP 18.7 for about 1,000 feet, somewhat parallel to the southeast-heading part of Hess Road, from a point about 500 feet south of Hess Road to a point where the route converges with Hess Road and heads northeast to cross Hess Road just north of Foxwood Lane. The proposed route then continues northeast somewhat parallel to and within 1,000 feet northwest of the northeast-heading part of Hess Road, continuing along the south side of the Hazelwood community to where the route crosses SR 152 near Ely Road at MP 19.9 and continues northeast through the Martino Farm and the Woodsbrook community, crossing Kings Arms Drive, to MP 20.5, where it turns and heads southeast to its terminus.

Hess Road Coalition Alternatives

125. Mr. Kenney, on behalf of himself and the Hess Road Coalition, recommends the HRC and SR 152 alternatives. Ms. Boyce supports the HRC alternative. Both of these alternatives head northeast from MP 18.7, cross Hess Road, and continue northeastward along a route that goes through mostly farmland, past the Sobolewski property, and through some forest, and that stays over 2,000 feet northwest of the northeast-heading part of Hess Road. After crossing SR 152, the HRC alternative continues through some more farmland and then through Bakersfield along the northwest side of Engle Road, before crossing Engle Road and rejoining Columbia's proposed route at MP 20.5. The SR 152 alternative heads south along the SR 152 corridor and the east side of Hazelwood to rejoin Columbia's proposed route at MP 19.9. Mr. Sobolewski opposes both of these alternatives. The Hazelwood Community Association, and Mr. Heeter and the Lavins, who live in Hazelwood along SR 152, oppose the SR 152 alternative.

126. Mr. Kenney states that construction using heavy equipment and the removal of mature trees along Columbia's proposed route between MPs 19.1-3 would damage his driveway and Foxwood Lane, and harm his property's beauty and future as a home site with a well, SRA, soil stability, and insulation from noise from the heavily-traveled Hess

⁷² The EA evaluated the Landis alternative because Woodsbrook Martino filed it before the EA was issued. The EA did not evaluate the Hess Road Coalition or Army Corps of Engineers alternative route recommendations because they were filed after the EA was issued.

Road. Mr. Kenney states that Columbia's map misrepresents the HRC and SR 152 alternatives, which would cross through open farmland north of Hess Road, thereby avoiding tree removal and other impacts on his property and affecting fewer other properties. We note that while construction along Columbia's proposed route might remove trees along Hess Road at the Foxwood Lane crossing, it will not remove buffering trees along Hess Road at other locations because the proposed alignment is about 0.1 miles from the road.

127. Mr. Kenney also argues that Columbia's proposed route would eliminate nine homes along Hess Road and two buildable lots, and affect property on Ely Road, as well as many homes in Woodsbrook. We note, however, that Columbia's proposed route will not eliminate any homes. In addition, Columbia adjusted its proposed pipeline alignment to more closely abut Foxwood Lane and property lines pursuant to landowners' and the Commission staff's requests to reduce impacts on homes and buildable lots.⁷³

128. Mr. Kenney asserts that the SR 152 alternative would avoid the most homes, arguing that Columbia's map changes the SR 152 alternative's route within the utility corridor along SR 152 to make it seem closer to several homes than it really is. Columbia notes, however, that it would have to site the pipeline farther away from the road and other utilities to provide adequate workspace for construction and maintenance. The HRC and SR 152 alternatives would affect lots along Engle Road and SR 152, respectively. Mr. Heeter, for example, states that the SR 152 alternative would cross his SRA, as well as a buried BGE electric service line to his home, and he and the Hazelwood Community Association state that the SR 152 alternative would clear trees that buffer homes along SR 152. We also note that while Columbia's proposed route goes through Woodsbrook, the HRC alternative would travel along the northeastern bounds of Woodsbrook through Bakersfield.

129. Mr. Kenney states that the HRC and SR 152 alternatives would avoid traffic congestion along the heavily-traveled Hess Road, which has multiple, densely-populated communities on its southeast side and the Hazelwood community set back from its northwest side, northwest of Columbia's proposed route. Mr. Kenney further states that Columbia's proposed route would prevent emergency vehicle access to four Hess Road homes that have only single-lane driveways. Mr. Heeter, however, asserts that SR 152 is at least as busy as Hess Road. The Hazelwood Community Association concurs and asks how a pipeline would affect widening SR 152.⁷⁴ We note that Columbia's proposed route and the HRC and SR 152 alternatives would all cross Hess Road and SR 152, although at different locations. We further note, however, that while the SR 152

⁷³ EA at 133.

⁷⁴ There is no record evidence of any plans to widen SR 152 at this location.

alternative would abut SR 152, Columbia's proposed route would not abut Hess Road, but would be about 0.1 miles north of it. Therefore, constructing or operating the project along this segment of Columbia's proposed route is not likely to significantly affect traffic, as would the SR 152 alternative.

130. Mr. Kenney asserts that there are significant erosion problems, difficult terrain, two streams, and both tidal and non-tidal wetlands along Columbia's proposed route. Mr. Kenney also contends that Columbia's data erroneously indicate that the HRC alternative would be longer than it really is. We note, however, that there is no record evidence to support Kenney's claims regarding the presence of tidal wetlands along Columbia's proposed route or any discrepancies in the alternative routes' lengths.

Ms. Boyce argues that the Commission should require Columbia to do more than 131. look at aerial photographs in considering the HRC alternative. Ms. Boyce argues that a break through trees along the HRC alternative that Columbia asserts is not wide enough for a 75-foot-wide construction path is wider than Columbia says it is and that the HRC alternative would affect fewer homes than Columbia indicates. While the HRC alternative affects Bakersfield, Boyce notes, it avoids Woodsbrook and all the homes along Hess Road. Ms. Boyce also asserts that the HRC alternative would (1) have fewer impacts on SRAs, wells, and emergency vehicle access because it goes through fewer residential properties, (2) cause less erosion because it would remove fewer trees, (3) avoid creating traffic hazards at the busy Hess Road/SR 152 intersection, (4) go through terrain more favorable for construction, (5) cause less dust and noise pollution and exposure to potential explosions since it is farther from homes, (6) avoid underground electric transformers along Hess Road, (7) be easier to maintain, provide easier access for future pipelines, be farther from ignition sources, and not affect property use because it is mostly in open farm land, and (8) not affect Hazelwood.

132. We note that the corresponding segment of Columbia's proposed route is about 1.7 miles long, while the HRC and SR 152 alternatives are about 2.0 and 2.2 miles long, respectively. Assuming a 75-foot-wide construction right-of-way, Columbia's proposed route and the HRC and SR 152 alternatives would affect about 15.5, 22.1, and 22.9 acres, respectively. Contrary to the unsupported assertions of the proponents of the alternatives, forest clearing along the routes would be about 2.2, 2.6, and 3.0 acres of temporary impact and 1.6, 1.4, and 2.0 acres of permanent impact within the pipeline easement, respectively. The HRC alternative crosses 16 properties, and Columbia's proposed route and the SR 152 alternative each cross 19 properties. The HRC and SR 152 alternatives would transfer similar project impacts away from the corresponding segment of Columbia's proposed route to other locations. While the kinds of impacts along these alternatives are not significantly different, their magnitude would be greater than those along Columbia's proposed route.

Landis Alternative

133. Woodsbrook Martino recommends a version⁷⁵ of Ms. Landis's alternative, which deviates from Columbia's proposed route at MP 19.9, heading southeast through a residential area along the SR 152 corridor, crossing Line MA, and turning to head northeast along the southeast side of Rutledge Road. It crosses Rutledge Road and Line MA along the BGE corridor, and then crosses the BGE corridor and continues northeastward through the Bierer property to rejoin Columbia's proposed route southeast of MP 20.7. The Keeneys, who live on the southwest side of SR 152 near Rutledge Road, and the Bierers, whose property is on the northwest side of Rutledge Road south of MP 20.7, oppose this alternative.

134. Woodsbrook Martino states that construction across Kings Arms Drive will cut off access to the Tedeschi property and at least four other properties for weeks. As the EA notes, however, installing a pipeline across Kings Arms Drive and other roads by an open cut method will take only a few days, and Columbia will maintain access for the property owners during that time.⁷⁶ Woodsbrook Martino states that residents along the Landis alternative could use SR 152 or a frontage road because Columbia could install plates over the open-cut trench that would cross those roads. We note, however, that Columbia could also do this for Kings Arms Drive or any other road.

135. Woodsbrook Martino objects to the EA's dismissal of the Landis alternative on grounds that working near power lines is dangerous. Woodsbrook Martino states that the low hanging (16 feet high) wires are not electric lines, but communication lines, and that the power lines are about 8 feet higher, which, Woodsbrook Martino contends, is high enough for construction equipment to pass under. We note that the utility/electric line crossing along Columbia's proposed route near SR 152 is a perpendicular crossing, which, as Woodsbrook Martino also notes, is a common and safe practice that the EA need not address.⁷⁷ The Landis alternative, however, would involve, not just a crossing, but a parallel alignment with power lines within a construction right-of-way along SR 152, requiring Columbia to work directly under power lines in violation of Occupational Safety & Health Administration requirements.⁷⁸

136. As the EA notes, there would be inadequate workspace to install or to operate and maintain the pipeline outside the berm parallel to SR 152 because, as Columbia notes,

⁷⁶ EA at 15-17.

⁷⁷ EA at 123-127.

⁷⁸ 40 CFR 29 1926.1480.

⁷⁵ The EA refers to this as the "Modified Landis Route Variation."

BGE has overhead electric power lines, underground electric service lines, and a high pressure gas distribution line with service laterals in or next to the SR 152 right-of-way, which would all be in the Landis alternative's construction workspace. Using heavy equipment in, near, or over these utilities could damage them and would be unsafe for workers. Installing the pipe within the road's berm or at the pavement's edge would, as the EA further notes, de-stabilize the road, and installing the pipe next to the existing utility right-of-way would place it very close to homes.

137. Woodsbrook Martino also argues that Columbia could move the existing power poles to make enough space for construction between the poles and SR 152. Moving the power poles, however, would bring them closer to homes and require more tree-clearing to accommodate new rights-of-way for both the relocated power line and the new pipeline, thus, increasing the disturbed corridor's width beyond the 75 feet needed to construct the pipeline.

138. Woodsbrook Martino also states construction along the Landis alternative would remove only a few scattered trees. Woodsbrook Martino's exhibits, however, clearly indicate tree removal along SR 152. Woodsbrook Martino contends that it would be better to remove certain unkempt trees along the Landis alternative than to remove landscaping along Columbia's proposed route, further arguing that if the Maryland State Highway Administration (SHA) were to decide to widen SR 152, it might remove all those trees anyway. Woodsbrook Martino, however, presents no evidence of any plans to widen SR 152.⁷⁹ Moreover, landowners along the Landis alternative oppose removing, for the purposes of the pipeline proposal before us, trees that screen their homes from SR 152.

139. Woodsbrook Martino states that construction along Columbia's proposed route would permanently remove about 0.17 acres of trees along the stream crossing on the Martino property. We note, however, that this part of the stream has no trees because it is in a cow pasture. Woodsbrook Martino states that the Landis alternative would avoid going through the Martinos' cow pasture. In this regard, we note that Columbia will address potential impacts on cattle in its construction plans and has worked with the Martinos to develop a route that minimizes impacts on the pasture's potential for future development.

⁷⁹ Review of information on the Maryland DOT's website does not indicate plans for widening Fallston Road/SR 152 within FY 2012 to 2017 Consolidated Transportation Program of the SHA. *Available at:*

http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/CTP/CT P_12_17/SHA_Documents/Final_SHA/SHA_Harford.pdf.

140. Woodsbrook Martino states the Landis alternative will affect no wells. We note, however, that landowners along the Landis alternative state there are, in fact, wells along that alternative.⁸⁰

141. Woodsbrook Martino states that the Landis alternative would not affect any SRAs. Columbia states, however, that in fact it would cross two SRAs. Woodsbrook Martino argues that the Landis alternative could be moved closer to SR 152 to avoid one of them. We note, however, that a 75-foot-wide construction right-of-way would have to be offset from the highway and existing utility corridor, and construction would require clearing the tree buffer that separates homes from highway. Woodsbrook Martino states that the Landis alternative could be shifted eastward to avoid the other SRA. This, however, would involve moving road and stream crossings to the other side of the BG&E corridor and rerouting the pipeline through other properties and near at least one home.

142. Woodsbrook Martino states that the waterbody crossing on the Landis alternative would be at an existing utility crossing, whereas the waterbody crossing on Columbia's proposed route would not.⁸¹ As discussed above, however, if the route is shifted eastward to avoid an SRA, the waterbody crossing would also be shifted. Since additional workspaces are needed on both sides of waterbody crossings, this would cause more impacts on other properties.

143. Contrary to assertions that Columbia could construct the Landis alternative entirely on state-owned property, the alternative would affect twice as many property owners -- crossing 22 private properties instead of 11. We note, in addition, that the Landis alternative would remove the many mature trees that buffer the Keeney home from SR 152, leaving that home directly exposed to heavy traffic. Conversely, Columbia's proposed route would cross SR 152 within open areas on both sides of the road, so few trees would need to be cleared. Accordingly, we concur with the EA's conclusion that the Landis alternative does not have substantial benefits over Columbia's proposed route.

Army Corps of Engineers Alternatives

144. The Army Corps of Engineers recommend two alternatives. As shown on Columbia's map, the COE-1 alternative follows the HRC alternative to the SR 152 crossing, but continues about 1,000 feet further northeast before turning southeastward

⁸⁰ See the sections about the Hess Road Coalition Route Alternatives and the Army Corps of Engineers Alternatives for more information.

⁸¹ The current route and the alternate route would cross the same waterbody, but at different locations.

to the northwest side of Engle Road in Bakersfield, where it turns southwestward to rejoin the HRC alternative. As shown on Columbia's map, the COE-2 alternative combines the SR 152 alternative with the Landis alternative.

145. The COE-1 alternative would be 0.4 miles longer, affect about 8.8 more acres, and cross two more SRAs than Columbia's proposed route. It would permanently clear an additional 0.2 acres of forest. The right-of-way would come within 25 feet of one more home, and within 50 feet of yet another home, than Columbia's proposed route. The alternative's \$10.8 million cost is about 21 percent more than the corresponding segment of Columbia's proposed route would cost. The COE-1 alternative would only shift impacts from one area to another; it would not reduce impacts on the environment, SRAs, or landowners.

146. Regarding the COE-2 alternative, we note that, as this order discussed previously, the SR 152 and Landis alternatives would likewise only shift impacts from one area to another. Since the COE-2 alternative is based on these two alternatives, we conclude that it also would fail to reduce environmental impacts.

Clarifications to the EA

147. In response to Columbia's request, we clarify that the "survey" the EA refers to at page 24 describes pre-blast surveys that the EA describes earlier, not the blast monitoring or post-blast surveys described later. We note that the EA's language comes from Columbia's resource report, which describes pre-blast surveys.

148. We also note that Columbia states that the General Permit for Discharges From Tanks, Pipes and Other Liquid Containment Structures at Facilities Other Than Oil Terminals has been reauthorized by the Maryland DE and is currently considered Discharge Permit No. 11-HT rather than Maryland DE General Discharge Permit No. 06 HT and National Pollution Discharge Elimination System (NPDES) Permit MDG67 as stated in the EA.⁸² We further note that Columbia states that Discharge Permit No. 11-HT and NPDES Permit No. MDG67 are, in fact, the same permit.

149. The EA⁸³ refers to the Maryland DNR and the Maryland DE regarding the Forest Conservation Act (FCA). All references on this page to the Maryland DE are intended to indicate that the Maryland DNR is the state agency that reviews those plans for activities on state owned lands, not the Maryland DE. We also clarify that (1) Baltimore County's FCA-required document is the Forest Conservation Plan/Forest Buffer

⁸² EA at 43.

⁸³ EA at 49.

Protection Plan and (2) the Maryland DNR's and Harford County's FCA-required document is the Forest Conservation Plan.

150. In conclusion, we have reviewed the information and analysis contained in the record, including the EA, regarding the project's potential environmental impacts. Based on our consideration of this information, we agree with the conclusions presented in the EA and find that if constructed and operated in accordance with Columbia's application, as supplemented, and the conditions imposed herein, approving this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

151. As this order notes earlier, any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with this certificate's conditions. We encourage cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, by applying state or local laws, may prohibit or unreasonably delay the construction or operation of facilities this Commission has approved.⁸⁴

152. At a hearing held on November 21, 2013, the Commission on its own motion received and made a part of this proceeding's record all evidence, including the application, as supplemented, and exhibits thereto, submitted in support of the authorization sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Columbia authorizing it to construct and operate the proposed facilities, as described and conditioned herein, and as more fully described in the application.

(B) The certificate authority issued 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 including, but not limited to, Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

⁸⁴See, e.g., Schneidewind v. ANR Pipeline Co., 485 U.S. 293 (1988);
National Fuel Gas Supply v. Public Service Comm'n, 894 F.2d 571 (2d Cir.1990);
and Iroquois Gas Transmission System, L.P., 52 FERC ¶ 61,091 (1990) and 59 FERC
¶ 61,094 (1992).

(3) compliance with the environmental conditions in Appendix B to this order; and

(C) Columbia's request for a pre-determination of rolled-in rate treatment of project costs is granted.

(D) 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 Commission's Secretary within 24 hours.

(E) The untimely motions to intervene are granted.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

Appendix A

Timely Motions to Intervene

Excelon Corporation Maryland Public Service Commission Susan and Frank Tedeschi ProLiance Energy, LLC David and Gail Raymond **Calpine Energy Services** Zonda and Owen F. Landis **Conoco Phillips Company** William R. Cole National Grid Delivery Companies Atmos Energy Marketing LLC New York State Electric and Gas Corporation NJR Energy Services Company New Jersey Natural Gas Company Virginia Natural Gas, Inc. National Fuel Gas Distribution Corporation Washington Gas Light Company Mid-Atlantic Council of Trout Unlimited Michael G. Martino NiSource Distribution Companies Orange & Rockland Utilities, Inc. City of Charlottesville, Virginia Woodsbrook Residents Gunpowder Riverkeepeer

Appendix B Environmental Conditions

As recommended in the environmental assessment (EA), this authorization includes the following conditions:

- 1. Columbia shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff information requests), and as identified in the EA, unless modified by this 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 Office of Energy Projects (OEP) before using that modification.
- 2. The Director of OEP has delegation authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of this Commission's Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure 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 (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
- 4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. As soon as they are available, and prior to the start of construction, Columbia shall file with the Secretary any

revised detailed survey alignment maps/sheets at a scale not smaller than 1:6000 with station positions for all facilities this Order approves. All requests for modifications of environmental conditions of this Order or site specific clearances must be and must reference locations designated on these alignment maps/sheets.

Columbia's exercise of eminent domain authority granted under Natural Gas Act section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. Columbia's right of eminent domain granted under Natural Gas Act section 7(h) does not authorize it to increase the size of its natural gas pipeline 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 1:6000 identifying all route realignments or facility relocations, staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federal-listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP before construction in or near that area.

This requirement does not apply to route variations required herein, extra workspace Columbia's Erosion and Sedimentation Control Plan allows, 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 the following:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. state regulatory authorities' recommendations; and
- d. agreements with individual landowners.

- 6. Within 60 days of the acceptance of this certificate and before construction, Columbia shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Columbia must file revisions to its 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 this Order requires;
 - b. how Columbia will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - c. the number of EIs assigned per spread and how Columbia 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 of the environmental compliance training 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 the training session(s);
 - f. the company personnel (if known) and specific part of Columbia's organizations 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 and Review Technique chart (or similar project scheduling diagram) and dates for:

(1)the completion of all required surveys and reports;

(2)the mitigation training of onsite personnel;

(3) the start of construction; and

(4) the start and completion of restoration.

7. **Beginning with the filing of its Implementation Plan**, Columbia shall each file updated status reports with the Secretary on a weekly basis until all construction and restoration activities are complete for each phase of the project. 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 current construction status of each spread, work planned for the following reporting period, and any scheduling 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(s) during the reporting period (both for the conditions the Commission imposes and any environmental conditions/permit requirements other federal, state, or local agencies impose);
- d. 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 that might relate to compliance with the requirements of this Order and the measures taken to satisfy their concerns; and
- g. copies of any correspondence Columbia receives from other federal, state, or local permitting agencies concerning instances of noncompliance and Columbia's responses.
- 8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Columbia shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
- 9. 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 the project affects are proceeding satisfactorily.
- 10. Within 30 days of placing the certificated facilities in service, Columbia shall each file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the certificate conditions Columbia have complied with or will comply with. This statement shall also identify

any areas the project affects where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

- 11. Columbia shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the right-of-way. **Prior to construction**, Columbia shall mail the complaint procedures to each landowner whose property would be the project crosses.
 - a. In its letter to affected landowners, Columbia shall:
 - (1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - (2) instruct the landowners that if they are not satisfied with the response, they should call Columbia's Hotline; the letter should indicate how soon to expect a response; and
 - (3) instruct the landowners that if they are still not satisfied with the response from Columbia's Hotline, they should contact the Commission's Dispute Resolution Service Helpline at 877-337-2237 or at <u>ferc.adr@ferc.gov</u>.
 - b. In addition, Columbia shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:
 - (1) the identity of the caller and date of the call;
 - (2) the location by milepost and identification number from the authorized alignment sheet(s) of the affected property;
 - (3) a description of the problem/concern; and
 - (4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
- 12. **Prior to construction,** Columbia shall file with the Secretary the final list with the locations of private wells within 150 feet of the project construction right-of-way and workspaces, access roads and aboveground facilities. Within 30-days of placing facilities into service, Columbia should file a report with the Secretary which addresses whether any complaints were received concerning water well yield or quality and how each complaint was resolved.

- 13. **Prior to construction,** Columbia shall file with the Secretary a copy of the final Forest Conservation Plan/Forest Buffer Protection Plan with Baltimore County, and the final Forest Conservation Plan with Harford County and the Maryland Department of Natural Resources along with documentation of consultation.
- 14. **Prior to construction**, Columbia shall file with the Secretary a copy of the final plans and mitigation measures for crossing the Garrison Forest Veterans Cemetery between mileposts 1.5 and 1.8., and documentation of consultations with the Maryland Department of Veterans Affairs.
- 15. **Prior to construction**, Columbia shall file with the Secretary a copy of the final plans and mitigation measures for crossing Oregon Ridge Park between mileposts 6.1 and 8.1 and documentation of consultations with the Baltimore County Department of Recreation and Parks.
- 16. Columbia shall **not begin implementation** of any treatment plans/measures (including archaeological data recovery; construction of facilities; and use of any staging, storage, or temporary work areas and new or to-be-improved access roads); **until**:
 - a. Columbia files with the Secretary any necessary treatment plans and state historic preservation officer comments on the reports;
 - b. the Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
 - c. the FERC staff reviews and the Director of OEP approves the cultural resources reports and plans, and notifies Columbia in writing that treatment plans/mitigation measures (including archaeological data recovery) may be implemented and/or construction may proceed.

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CONTAINS **PRIVILEGED INFORMATION – DO NOT RELEASE**."

17. **Prior to construction**, Columbia shall file documentation showing that the plats with adjusted septic reserve areas have been re-filed with and approved by Harford County for the properties shown on Drawing Numbers TA-6526-9087, TA-6526-9089, TA-6526-9090, and TA-6526-9077.

18. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval of the Director of the OEP, revised site-specific residential Drawing Numbers TB-6526-8816, TB-6526-8834, TB-6526-8836, TB-6526-8894, TB-6526-8817, and TB-6526-8875. These revised plans shall increase the separation between the construction workspace and the home, and/or more accurately reflect the built environment based on the results of any outstanding civil surveys of these parcels.