170 FERC ¶ 61,045 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Richard Glick and Bernard L. McNamee.

Columbia Gas Transmission, LLC

Docket No. CP18-137-000

ORDER ISSUING CERTIFICATE AND APPROVING ABANDONMENT

(Issued January 23, 2020)

- 1. On March 26, 2018, Columbia Gas Transmission, LLC (Columbia) filed an application, pursuant to sections 7(b) and 7(c) of the Natural Gas Act (NGA)¹ and Part 157 of the Commission's regulations,² requesting authorization to construct, operate, abandon, and replace pipeline and ancillary facilities in Vinton, Jackson, Gallia, and Lawrence Counties, Ohio, and Wayne County, West Virginia (Buckeye XPress Project). The primary purpose of the project is to modernize and replace existing pipeline facilities to ensure safe and reliable transportation service.
- 2. As discussed below, we grant the requested authorizations, subject to certain conditions.

I. Background and Proposal

3. Columbia is a Delaware limited liability company and an indirect, majority-owned subsidiary of TC Energy Corporation.³ Columbia is a natural gas company as defined by section 2(6) of the NGA,⁴ engaged in transporting natural gas and operating underground storage fields in interstate commerce, subject to the Commission's jurisdiction. Columbia operates approximately 12,000 miles of pipeline facilities located in Delaware,

¹ 15 U.S.C. §§ 717f(b), (c) (2018).

² 18 C.F.R. pt. 157 (2019).

³ TransCanada Corporation changed its name to TC Energy Corporation on May 3, 2019.

⁴ 15 U.S.C. § 717a(6) (2018).

Kentucky, Maryland, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia.

- 4. Columbia's R-System, which currently provides over 1,000,000 dekatherms per day (Dth/d) of firm transportation service,⁵ includes pipelines R-501, R-500, R-601, and R-701.⁶ According to Columbia, the R-System is critical to Columbia's storage operations because it provides the primary mode of transporting gas into Ohio for summer storage injections and transporting gas southward from Ohio storage fields to replenish eastern storage fields in the winter. In January 2017, the Commission approved Columbia's proposal to abandon and replace approximately 28 miles of the existing 20-inch-diameter R-501 pipeline with a new, approximately 27-mile-long, 36-inch-diameter R-System pipeline loop (R-801 Loop) as part of its Leach XPress Project (Leach XPress).⁷ The Buckeye XPress Project is designed to extend the R-801 Loop, ⁸ replacing the remaining portion of the R-501 pipeline and part of the R-500 pipeline.⁹
- 5. Columbia explains that the R-501 and R-500 pipelines, which were constructed in the 1940s, have wrinkle bends because they were bent to conform to the terrain of the land. Due to the age of the pipeline and the current requirements of the United States Department of Transportation's Pipeline Hazardous Material and Safety Administration (PHMSA) regulations, Columbia states that replacement of the remaining portions of

⁵ Columbia's Application at 4.

⁶ See Resource Report 1 of Columbia's Application at 1-6. See also Exhibit F of Columbia's Application.

⁷ Columbia Gas Transmission, LLC, 158 FERC ¶ 61,046 (2017).

⁸ Columbia's Application at 3.

⁹ Columbia states the R-500 pipeline is essentially a continuation of the R-501 pipeline. Columbia's Application at 5.

¹⁰ Mississippi River Transmission Co., 40 FERC ¶ 61,179, at 61,558 n.1 (1987) ("Wrinkle bends are creases in the pipewall put in during construction in order to direct the pipe along its route. This technique lowers the pipeline's ability to withstand pressure, and its [maximum allowable operating pressure] must be reduced accordingly."); Columbia, 158 FERC ¶ 61,046 at P 7, n. 14 ("Wrinkle bends are often linked to corrosion because of the difficulty of fully and uniformly coating wrinkled pipeline.").

¹¹ 49 C.F.R. § 192.315 (2019) (requirements for wrinkle bends in steel pipe).

the R-501 and R-500 pipelines is needed to continue safe and reliable natural gas transportation on its system.

- 6. Specifically, Columbia proposes the following abandonment activities:
 - abandon in-place 58.7 miles of 20-inch-diameter pipeline, remove two mainline valves, crossover piping at valve settings, aboveground facilities, and exposed pipeline segments; and plug and remove consumer taps in Vinton, Jackson, Gallia, and Lawrence Counties, Ohio (R-501 pipeline);
 - abandon in-place approximately 1.1 miles of 2- and 3-inch-diameter distribution pipeline in Jackson County, Ohio (R-530 pipeline); and
 - abandon in place 2.1 miles of 20- and 24-inch-diameter pipeline and associated facilities in Lawrence County, Ohio (R-500 pipeline).

To replace the abandoned pipelines, Columbia proposes to:

- construct and operate 66.1 miles of new 36-inch-diameter pipeline (R-801), including four new mainline valves, four new tie-in assemblies, and three bi-directional pig launchers/receivers in Vinton, Jackson, Gallia, and Lawrence Counties, Ohio;
- construct and operate 0.2 mile of 4-inch-diameter lateral pipeline in Jackson County, Ohio (Wellston Lateral);
- install a new regulation run¹² at the existing Ceredo Compressor Station in Wayne County, West Virginia; and
- modify other appurtenances in Ohio.
- 7. Columbia proposes to replace the abandoned pipelines with larger, 36-inch-diameter pipe to match the 36-inch-diameter segment of the R-801 Loop constructed as part of the Leach XPress. ¹³ Columbia asserts that the entire new R-801 pipeline must have a consistent internal diameter to make it passable by in-line inspection tools and to

¹² A regulation run is typically associated with a pressure regulation valve that is used to control pressure in a pipeline system and to prevent spikes of high pressure, especially where a pipeline may enter/exit a compressor station.

¹³ See Columbia, 158 FERC ¶ 61,046 at PP 6-7.

eliminate possible system bottlenecks. The use of a 36-inch-diameter pipe will increase Columbia's transportation capability by 275,000 Dth/d.

- 8. Columbia held a non-binding open season from January 13 to February 16, 2017, for incremental service on the Buckeye XPress Project. Columbia received bids for over one billion cubic feet per day of transportation capacity from various parties but did not secure any precedent agreements. Columbia also offered to evaluate proposals from existing shippers to turnback firm transportation capacity under existing service agreements, but "received no offers for turnback capacity that would have provided a reduced facility benefit to the [p]roject." 15
- 9. Columbia explains that the Buckeye XPress Project is part of its modernization efforts, which are designed to replace specific aging portions of Columbia's pipeline system. Columbia proposes to recover the costs associated with the replacement portion of the project from existing shippers through its Capital Cost Recovery Mechanism (CCRM)¹⁶ as provided for in its Modernization II Settlement. Columbia has allocated the costs of the Buckeye XPress Project, estimated to be approximately \$709 million, between expansion and existing shippers on a pro rata basis consistent with the Modernization II Settlement. Application of this methodology results in approximately \$500 million being allocated to the existing shippers and approximately \$209 million allocated to expansion shippers. Columbia proposes to establish an incremental recourse rate for the transportation service using the expansion capacity under its proposed Rate Schedule FTS-BXP.

¹⁴ Columbia's Application at 11.

¹⁵ *Id*

¹⁶ "The CCRM allows Columbia to recover, through an additive capital demand rate, its revenue requirement for capital investments made under Columbia's long-term plan to modernize its interstate transmission system." *Id.* at 9 n.12.

¹⁷ On March 17, 2016, the Commission approved the Modernization II Settlement. *Columbia Gas Transmission, LLC*, 154 FERC ¶ 61,208 (2016).

II. Procedural Matters

A. <u>Notices, Interventions, and Comments</u>

- 10. Notice of Columbia's application was issued on April 9, 2018 and published in the Federal Register on April 16, 2018. The notice set April 30, 2018 as the deadline for filing interventions and comments. Timely motions to intervene were filed by National Fuel Gas Distribution Corporation; Independent Oil & Gas Association of West Virginia, Inc.; New York State Electric & Gas Corporation; Calpine Energy Services, L.P.; Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas and d/b/a Elkton Gas; NJR Energy Services Company; New Jersey Natural Gas Company; National Grid Gas Delivery Companies; NiSource Distribution Companies; PSEG Energy Resources & Trade LLC; Shell Energy North America (US), L.P.; Statoil Natural Gas LLC; Ohio Farm Bureau Federation, Inc; Range Resources-Appalachia, LLC (Range Resources); ¹⁹ Duke Energy Ohio, Inc.; Duke Energy Kentucky, Inc.; Piedmont Natural Gas Company, Inc.; Ohio Environmental Council; Sierra Club; and Center for Biological Diversity.²⁰ Kaiser Marketing Appalachian, LLC filed an untimely motion to intervene, which was denied by the Secretary of the Commission's notice on July 26, 2018. Following issuance of the Environmental Assessment (EA) for public comment, the Ohio Valley Environmental Coalition and FreshWater Accountability Project (Ohio Valley and FreshWater) jointly filed a late motion to intervene citing environmental concerns, which was granted by Secretary's notice on August 12, 2019.
- 11. The Commission received comments in opposition from landowners and other individuals raising a variety of concerns on environmental resources, including the projects' impacts on the Wayne National Forest. Labor organizations and other individuals filed comments in support of the project. These concerns are addressed in the EA prepared by Commission staff, as well as the environmental section of this order.

¹⁸ 83 Fed. Reg. 16,352.

¹⁹ On April 30, 2018, along with its motion to intervene, Range Resources filed a protest raising concerns regarding project need and subsidization. Range Resources also filed a motion to respond and response to Columbia's Answer to the protest on May 25, 2018. Range Resources subsequently withdrew its protest and response on September 5, 2019. Therefore, this order does not address the concerns raised in Range Resources' protest or answer.

²⁰ Timely, unopposed motions to intervene are granted automatically pursuant to Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c)(1) (2019).

B. Evidentiary Hearing

- 12. In their joint motion to intervene, the Ohio Environmental Council, Sierra Club, and the Center for Biological Diversity (collectively, Ohio Environmental Council) request a formal hearing to address whether the project is in the public convenience and necessity, including but not limited to, whether the project's adverse environmental effects outweigh any public benefits.
- 13. An evidentiary, trial-type hearing is necessary only where there are material issues of fact in dispute that cannot be resolved based on the written record. The Ohio Environmental Council has not raised a material issue of fact that the Commission cannot resolve based on the written record. As demonstrated by the discussion below, the existing written record provides enough basis to resolve the issues relevant to this proceeding. Therefore, we deny the Ohio Environmental Council's request for a formal hearing.

III. Discussion

14. Since the existing facilities have been used to transport natural gas in interstate commerce, subject to the Commission's jurisdiction, and because the proposed replacement facilities will be used for jurisdictional service, the proposed abandonment, construction, and operation of the facilities are subject to the requirements of subsections (b), (c), and (e) of section 7 of the NGA.²²

A. <u>Certificate Policy Statement</u>

15. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.²³ The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing

²¹ See, e.g., Southern Union Gas Co. v. FERC, 840 F.2d 964, 970 (D.C. Cir. 1988); Dominion Transmission, Inc., 141 FERC ¶ 61,183, at P 15 (2012).

²² 15 U.S.C. §§ 717f(b), (c), (e) (2018).

²³ Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227, corrected, 89 FERC ¶ 61,040 (1999), order on clarification, 90 FERC ¶ 61,128, further clarified, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

customers, the applicant's responsibility for unsubscribed capacity, avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction. Under this policy, the threshold requirement for existing applicants proposing new projects is that the applicant 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 location of the new pipeline facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to consider the environmental analysis where other interests are addressed.

1. Subsidization and Impact on Existing Customers

- 16. Columbia's proposal satisfies the threshold requirement that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. The Certificate Policy Statement provides it is not a subsidy for existing customers to pay for projects designed to replace existing capacity or improve the reliability or flexibility of existing service. Because the Buckeye XPress Project was identified as part of the Modernization II Settlement for inclusion in the CCRM, Columbia has allocated the project costs between existing shippers and incremental shippers consistent with the pro rata allocation methodology adopted in the Modernization II Settlement. The Modernization II Settlement allocation methodology ensures base shippers will not subsidize the expansion portion of the project.
- 17. Regarding the costs associated with the new capacity, Columbia proposes an incremental rate to recover those costs. The Commission has determined, in general, that where a pipeline proposes to charge incremental rates for new construction that are higher than the pipeline's applicable system rates, the pipeline satisfies the threshold requirement that the project will not be subsidized by existing customers. As further discussed below, the proposed incremental reservation rate exceeds the maximum system

²⁴ Certificate Policy Statement, 88 FERC at 61,746 n.12.

²⁵ Stipulation and Agreement of Settlement, Appendix E, Docket No. RP12-1021-000 (Sept. 4, 2012).

²⁶ See, e.g., Dominion Transmission, Inc., 155 FERC ¶ 61,106, at P 15 (2016).

rate. Therefore, Columbia's proposed incremental rate eliminates the risk of subsidization by its existing customers of the expansion component of the project.

18. We also find that the Buckeye XPress Project will not adversely affect service to Columbia's existing customers, or to existing pipelines in the region or their captive customers. The project is designed to increase reliability, safety, and flexibility to Columbia's existing customers. And Columbia has designed the project to provide the incremental service while maintaining existing service obligations. In addition, no other pipelines or their customers have protested Columbia's proposal.

2. <u>Landowners and Communities</u>

- 19. Regarding impacts on landowners and communities, we find that Columbia has taken steps to minimize any adverse effects on landowners and communities. In total, the project would affect approximately 1,532 acres during construction, approximately 478 acres of which would be retained for operation. The pipeline was routed to maximize collocation with existing rights-of-way. About 51 percent of the project would be adjacent to existing pipeline corridors, electric transmission lines, or other linear infrastructure. Construction right-of-way was overlapped up to 25 feet where new pipeline construction right-of-way abutted Columbia's existing right-of-way on several segments that did not present engineering or safety concerns. Certain segments of the pipeline would not be collocated in order to reduce impacts on sensitive resources, to address landowners' and other stakeholders' concerns, and to avoid specific construction constraints, including the presence of other pipelines owned by Columbia.
- 20. On August 22, 2019, landowners, Patricia and Wayne Amendt, filed a comment renewing previously expressed concerns about the placement of the pipeline on their property and dissatisfaction with ongoing easement negotiations.²⁷ The Amendts request that we delay issuance of the certificate pending their negotiations with Columbia on the location of the pipeline on their property. As stated above, Columbia's proposal includes collocating the pipeline with existing rights-of-way; however, "terrain, third party encroachments, sensitive environmental conditions, and current safety standards" prevent collocation for all segments of the pipeline.²⁸ Columbia stated that engineering constraints on very steep slopes and ravines required alternative routing between mileposts 11.5 and 13.2, which resulted in crossing the Amendt's property.²⁹ Upon

²⁷ The Amendts August 22, 2019 letter supplements their comments filed on January 7, 2019, February 13, 2019, and February 21, 2019.

²⁸ Columbia's January 15, 2019 Response to Data Request No. 2.

²⁹ *Id*.

analysis, Columbia adjusted the route to avoid existing structures on the Amendts' property, while still allowing for the horizontal directional drill (HDD) crossing of Highway 132. Columbia examined other possible alternatives in response to the Amendts' concerns; these reroutes would follow the edge of the property boundary but would require the likely removal of structures and realignment of the Highway 132 HDD. Commission staff reviewed the proposed alternative reroutes in its preparation of the EA for the project and found that any alternative routes would impact more, newly affected landowners, increase forest impacts, and require re-positioning of the Highway 32 HDD.³⁰ Potential reroutes identified and analyzed by staff either did not provide a significant environmental advantage or would shift the impacts from the current landowners to new landowners.³¹ We agree. Therefore, because we approve Columbia's proposed route across the Amendts' property, we find no reason to delay issuance of the certificate pending any continuing negotiations between the Amendts and Columbia.

3. Project Need

- 21. The Ohio Environmental Council, Sierra Club, the Center for Biological Diversity, Ohio Valley, and FreshWater (Conservation Intervenors) generally allege that there is no demonstrated need for the expansion component of the project.³² The Conservation Intervenors assert that Columbia has not provided precedent agreements as evidence of need, but relies on future or anticipated need without support.
- 22. As described above, the primary purpose of the Buckeye XPress Project is to replace aging pipelines on its R-System to ensure that it can continue safe and reliable transportation service to meet its existing contractual service obligations. As discussed below, the creation of additional capacity is incidental to the need to replace aged sections of Columbia's system in order to continue safe and reliable natural gas transportation on its system. Accordingly, we find the project will serve a demonstrated need.
- 23. With respect to the 275,000 Dth/d of incremental firm service capability that will result from Columbia's proposal to replace the existing 20- and 24-inch-diameter

³⁰ EA at C-45.

³¹ *Id*.

³² Conservation Intervenors' June 19, 2019 Comments on the Environmental Assessment at 26-28. *See also* Ohio Environmental Council, Sierra Club, and the Center for Biological Diversity's (collectively, the Ohio Environmental Council) April 30, 2018 Motion to Intervene at 4-5; Ohio Valley and FreshWater June 19, 2019 Motions to Intervene at 5.

pipelines segments with 36-inch-diameter pipeline, we recognize that a significant portion of the expansion capacity has not been subscribed to date. However, we also recognize that installing replacement pipeline that will match the 36-inch diameter of the existing R-801 facilities will provide the benefits of enabling the company to perform inline inspections of the entire new R-801 pipeline with fewer facilities³³ and eliminating possible system bottlenecks.

- 24. Commission staff analyzed the ramifications associated with the construction of a 36-inch-diameter pipeline as proposed instead of installing a 20-inch-diameter pipeline.³⁴ The analysis shows that the acreage needed to operate the alternative pipeline facilities would be substantially the same, and construction of such facilities would affect the same resources, such as forests, waterbodies, and wetlands.³⁵ Based on guidance for the width of pipeline construction rights-of-way, and based on the existing and proposed pipeline diameters, the temporary construction right-of-way for the larger diameter pipe is approximately 15 feet wider.³⁶ However, the permanent operational right-of-way requirement would not change. Accordingly, requiring a reduction in pipeline diameter to more closely match the currently-contracted service levels would likely have no effect on the pipeline route, the operational footprint, or the potential exercise of eminent domain. Under these circumstances, we conclude that construction of a 36-inch-diameter pipeline is consistent with the public convenience and necessity.
- 25. We further note that on August 28, 2019, Columbia filed a 5-year precedent agreement with Range for 50,000 Dth/d of firm service under negotiated rates using the expansion capacity. Columbia indicates that it is continuing to negotiate with other potential project shippers as well.³⁷

³³ Although it would be possible to pig an inconsistently-sized pipeline loop (i.e., one containing both 36- and 20-inch-diameter segments), doing so would require, at a minimum, the construction of additional above ground facilities including pig launchers and receivers along the pipeline, increasing to some extent both the project's construction and operational footprint and related environmental impacts.

³⁴ In Columbia's February 12, 2019 Response to Data Request, Columbia states it requires a minimum pipeline diameter of 20-inches to meet its current contractual obligations.

³⁵ May 20, 2019 Environmental Assessment at C-7.

³⁶ INGAA Foundation "Temporary Right-of-Way Width Requirements for Pipeline Construction" (1999).

³⁷ Columbia's July 5, 2018 Response to Data Request. We note that the

26. In addition, Conservation Intervenors assert that the determination of need is relevant to the Commission's environmental review.³⁸ However, the Intervenors are conflating the Commission's balancing of economic benefits (i.e., market need) and effects under the Certificate Policy Statement with the description of the purpose and need in the environmental document. The Council for Environmental Quality's regulations require environmental assessments to "include brief discussions of the need for the proposal, of alternatives..., of the environmental impacts of the proposed action and alternatives....." The Commission determines whether the project is needed by evaluating the criteria established by the Certificate Policy Statement, as discussed above. Neither the NGA nor the National Environmental Policy Act (NEPA) requires the Commission to make its determination of whether a project is required by the public convenience and necessity as part of the environmental assessment.

4. Conclusion

27. We find that the benefits of the Buckeye XPress Project, which will be provided to Columbia's existing customers, outweigh any adverse effects on existing shippers, other pipelines and their captive customers, and on landowners and surrounding communities. Consistent with the criteria discussed in the Certificate Policy Statement and subject to the environmental discussion below, the public convenience and necessity require approval of Columbia's proposal, as conditioned in this order.

B. Abandonment

28. Section 7(b) of the NGA provides that an interstate pipeline company may abandon jurisdictional facilities or services only if the Commission finds the

Commission has recognized that "constructing a larger capacity pipeline than immediately necessary in a location where there is potential for future growth in demand for service on the pipeline is appropriate as it will minimize potential environmental and landowner impacts that could occur in the future were a smaller pipeline constructed now." NEXUS Gas Transmission, LLC, 160 FERC ¶ 61,022 at P 46 (2017). See also Texas Eastern Transmission, LP, 129 FERC ¶ 61,151 (2009) (Commission granted Texas Eastern certificate authority to abandon by removal 20-inch and 24-inch-diameter pipeline totaling approximately 24.2 miles by replacing it with 24.2 miles of 36-inch-diameter pipeline). Id. ¶ 61,668-669.

³⁸ Conservation Intervenors' June 19, 2019 Comments on the EA at 27.

³⁹ 40 C.F.R. § 1508.9(b) (2019).

abandonment is permitted by the present or future public convenience or necessity. ⁴⁰ When an applicant proposes to abandon facilities, the continuity and stability of existing services are the primary consideration in assessing whether the public convenience or necessity permit the abandonment. ⁴¹ If it is found that an applicant's proposed abandonment for particular facilities will not jeopardize continuity of existing gas transportation services, it will defer to the applicant's business judgment. ⁴²

29. Columbia proposes to abandon approximately 61.9 miles of pipeline and appurtenances due to age and integrity issues and replace it with newer pipeline. The proposed abandonment and replacement will enable Columbia to continue safe and reliable transportation service to meet its existing contractual service obligations. Accordingly, we find Columbia's proposed abandonment is required by the public convenience or necessity.

C. Rates

30. Columbia estimates the Buckeye XPress Project will cost a total of \$709 million. Columbia proposes to allocate approximately \$209 million to the new incremental capacity and approximately \$500 million to the replacement capacity. The costs allocated to the replacement capacity will be borne by Columbia's existing shippers, in accordance with the pro-rata allocation methodology set forth in the Modernization Settlements.

1. <u>Incremental Recourse Rate</u>

31. Columbia proposes an incremental recourse rate under Columbia's proposed Rate Schedule FTS-BXP for the transportation service utilizing the incremental capacity created by the Buckeye XPress Project. Columbia proposes an \$18.281 per Dth per month reservation charge and a \$0.000 per Dth usage charge, based on a first-year cost of service for the incremental facilities of \$60,328,169 and billing determinants of 275,000 Dth/d (reflecting on the design capacity of the expansion facilities). In developing the proposed incremental reservation charge, Columbia uses its existing transmission

⁴⁰ 15 U.S.C. § 717f(b) (2018).

⁴¹ See, e.g., El Paso Natural Gas Co., L.L.C., 148 FERC ¶ 61,226, at P 12 (2014).

⁴² See, e.g., Trunkline Gas Co., 145 FERC ¶ 61,108, at P 65 (2013) (citing Northern Natural Gas Co., 142 FERC ¶ 61,120 (2013)).

depreciation rate of 1.50 percent depreciation rate⁴³ and a pre-tax multiplier of 12.98 percent.⁴⁴

- 32. Columbia's first-year cost of service includes \$17,162,272 of costs for existing capacity reserved for the project. Commission policy requires that for an NGA section 7 proceeding certificating new facilities, incremental rates should be designed to reflect only the incremental costs associated with the new facilities and should not reflect a reallocation of costs related to existing facilities or other common costs. Therefore, the costs associated with existing capacity should be removed from the Buckeye XPress Project's cost of the expansion service. 46
- 33. On July 5, 2018, in response to a staff data request, Columbia affirmed it is not proposing a separately identifiable income tax allowance as part of its proposed cost of service because it is using a pre-tax rate of return. Columbia also stated it is not a Master Limited Partnership as the term is used in the Revised Policy Statement. Furthermore, Columbia affirmed it does incur an income tax liability, but not in its own name. Income flows up to and is reported by Columbia Pipeline Group (CPG) corporate parent entity and is included in a consolidated federal income tax return. Each of the CPG corporate entities, including Columbia, pays its share of federal income taxes through intercompany accounts that are periodically settled. State tax treatment works similarly, though in some cases, CPG corporate entities may pay taxes directly to the states. Accordingly,

⁴³ Columbia's current depreciation rate was established in Docket No. RP12-101-000. *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062 (2013).

⁴⁴ Columbia's current pre-tax return was established in Docket No. RP95-408-000. *Columbia Gas Transmission Corp.*, 79 FERC ¶ 61,044 (1997).

⁴⁵ Transcontinental Gas Pipe Line Co., LLC, 165 FERC ¶ 61,221, at P 25 (2018); Tennessee Gas Pipeline Co., 161 FERC ¶ 61,265, at P 21 (2017); Transcontinental Gas Pipe Line Co., 141 FERC ¶ 61,091, at P 27 (2012).

⁴⁶ While the Commission rejects Columbia's proposal to include in the incremental recourse rates for its Buckeye XPress Project costs associated with the reserved capacity that are already included in its currently effective rates, this finding is without prejudice to Columbia proposing in its next NGA section 4 rate proceeding an incremental rate design that allocates reserved capacity costs to the subject services.

⁴⁷ Inquiry Regarding the Commission's Policy for Recovery of Income Tax Costs, 162 FERC ¶ 61,227 (2018) (Revised Policy Statement).

Columbia affirms it has an actual federal and state corporate income tax liability associated with its income.

- 34. We have reviewed Columbia's proposed cost of service and rates, as well as its July 5, 2018 response to the staff data request, and find Columbia's proposal generally reflects current Commission policy. Under the Commission's Certificate Policy Statement, there is a presumption that incremental rates should be charged for proposed expansion capacity if the incremental rate exceeds the maximum system recourse rate. After removing the \$17,162,272 costs for existing capacity reserved for the project, Columbia's proposed incremental monthly reservation charge for the Buckeye XPress Project is still higher than the maximum reservation charge of \$5.903 per Dth under Columbia's currently-effective Rate Schedule FTS. We therefore approve Columbia's proposed rates, as conditioned above.
- 35. Columbia proposes to apply its generally applicable system surcharges to recover fuel costs associated with the Buckeye XPress Project. These surcharges consist of the: (1) Retainage Adjustment Mechanism, through which Columbia recovers lost and unaccounted for quantities and company use gas, including the fuel for Columbia's gas-fired compressors; and (2) the Electric Power Cost Adjustment, through which Columbia recovers the costs of powering its electric-powered compressor stations. Columbia's Exhibit Z-1 of its application shows that the project will result in both Retainage Adjustment Mechanism and Electric Power Cost Adjustment savings. We approve Columbia's proposal to charge its generally applicable system fuel retention and electric power rates.
- 36. In addition, Columbia proposes to assess its generally applicable Transportation Costs Rate Adjustment (TCRA) and Operational Transaction Rate Adjustment (OTRA) surcharges. Columbia's Exhibit Z-1 of its application shows that the project will result in both TCRA and OTRA savings. We approve Columbia's proposal to assess its generally applicable TCRA and OTRA surcharges.

2. Recovery of Replacement Costs

37. As stated above, Columbia proposes to recover the replacement costs from its existing customers through its CCRM mechanism. To the extent any of the replacement project costs are not recovered through its CCRM, ⁴⁹ Columbia requests a predetermination of rolled-in rate treatment for replacement costs allocated or otherwise

⁴⁸ Columbia Gas Transmission, LLC, FERC NGA Gas Tariff, Baseline Tariffs, Currently Effective Rates, FTS Rates, 57.0.0.

⁴⁹ "Article V establishes a moratorium on any changes to the Settlement base rates through January 31, 2022." *Columbia*, 154 FERC \P 61,208 at P 9.

attributable to existing shippers. To support a request for a pre-determination that a pipeline may roll the costs of a project into its system-wide rates in its next NGA section 4 rate proceeding, a pipeline must demonstrate that rolling-in the costs associated with the construction and operation of new facilities will not result in existing customers subsidizing the expansion. The Certificate Policy Statement specifically states that increasing the rates of existing customers to pay for projects designed to replace existing capacity or improve the reliability or flexibility of a pipeline's existing services is not a subsidy, and that the costs of such a project may be rolled-in a future rate case.⁵⁰

38. The purpose of the replacement component of the Buckeye XPress Project is to replace aged and outdated facilities to improve the reliability of existing services for existing customers. Therefore, consistent with the Certificate Policy Statement and Commission precedent,⁵¹ we will grant Columbia's request for a pre-determination of rolled-in rate treatment for the replacement portion of the Buckeye XPress Project. We note that the reasonableness of any specific costs that Columbia may seek to recover in a future proceeding is an issue to be determined in that proceeding.

3. Reporting Incremental Costs

39. Section 154.309 of the Commission's regulations⁵² includes bookkeeping and accounting requirements applicable to all expansions for which incremental rates are approved to ensure that costs are properly allocated between pipelines' existing shippers and incremental expansion shippers. Therefore, Columbia must keep separate books and accounting of costs and revenues attributable to the Buckeye XPress Project capacity and incremental services using that capacity as required by section 154.309. The books should be maintained with applicable cross-references as required by section 154.309. This information must be in sufficient detail, so the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 rate case, and the information must be provided consistent with Order No. 710.⁵³

⁵⁰ Certificate Policy Statement, 88 FERC at 61,746 at n.12.

⁵¹ Columbia Gas Transmission, LLC, 161 FERC ¶ 61,204, at PP 18-19 (2017).

⁵² 18 C.F.R. § 154.309 (2019).

 $^{^{53}}$ Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines, Order No. 710, 122 FERC ¶ 61,262, at P 23 (2008).

D. Environmental Analysis

- 40. On August 1, 2017, Commission staff began its environmental review of the Buckeye XPress Project by granting Columbia's request to use the pre-filing process in Docket No. PF17-6-000. As part of the pre-filing review, Commission staff participated in open houses sponsored by Columbia in Vinton, Jackson, and Lawrence Counties, Ohio, on August 15, 16, and 17, 2017, respectively, to explain the environmental review process to interested stakeholders.
- 41. As part of the pre-filing review in Docket No. PF17-6-000, on October 16, 2017, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Planned Buckeye XPress Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Sessions* (NOI). The NOI was published in the Federal Register⁵⁴ and mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners.
- 42. On October 24 and 25, 2017, Commission staff conducted public scoping sessions in Ironton and Jackson, Ohio, respectively, to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the EA. No comments were received at the Ironton scoping session and five individuals provided oral comments on the project at the Jackson scoping session. Transcripts of the scoping sessions were entered into the public record in Docket No. PF17-6-000. In addition to the comments received at the scoping sessions, a number of written comments on the NOI were received from various interested stakeholders.
- 43. The primary issues raised during the scoping process the need for the expansion component of the proposed project, the scope of the EA and NEPA analysis, the need for an environmental impact statement (EIS) rather than an EA, inspections during construction, soils (e.g., drain tiles, farming, and erosion and sediment control), wetland and waterbody impacts and mitigation, wells and springs, vegetation (e.g., forests), invasive species, pollinators, wildlife and fisheries, threatened and endangered species impacts, socioeconomic impacts, cultural resources, grazing, impacts to the Wayne National Forest, noise, safety (e.g., emergency system shutdown capability, leaks), air quality, greenhouse gas (GHG) emissions, climate change, cumulative impacts, and alternative routing.
- 44. To satisfy the requirements of NEPA, Commission staff prepared an EA for Columbia's proposal. The EA was prepared with the cooperation of the U.S. Army Corps of Engineers (Army Corps) and the U.S. Forest Service (Forest Service). The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation,

⁵⁴ 82 Fed. Reg. 49,012 (2017).

fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, socioeconomics, cumulative impacts, and alternatives. All substantive comments received in response to the NOI or raised during the scoping process were addressed in the EA.

45. The EA was issued for a thirty (30) day comment period and placed into the public record on May 20, 2019. The Commission received comments on the EA from Columbia, the U.S. Fish and Wildlife Service (FWS), the U.S. Environmental Protection Agency (EPA), the Forest Service, the Ohio State Historic Preservation Office (Ohio SHPO), the Cherokee Nation, the Teamsters National Pipeline Labor Management Cooperation Trust (Teamsters), Pipeliners Union 798, and the Conservation Intervenors, as well as from a number of landowners and other interested individuals. The commenters raised concerns regarding the need for an EIS; the EA's reliance on future environmental plans; abandonment; contamination; impacts on geology, soils, wetlands, waterbodies, forested areas and Wayne National Forest, vegetation and plant species, wildlife, threatened and endangered and sensitive species, land use, recreation, visual resources, noise, cultural resources, air quality, public health and safety, climate change, and cumulative impacts. We address the comments below.

1. Procedural Issues

a. Request for an Environmental Impact Statement

- 46. Several commenters argue that an EIS should be prepared to fully analyze the Buckeye XPress Project's impacts and to ensure the public has meaningful participation in the process.⁵⁵ The Conservation Intervenors generally argue that the EA does not support a finding of no significant impact with respect to climate impacts, biological resources, pipeline safety, and water resources.⁵⁶
- 47. Under NEPA, agencies must prepare an EIS for major federal actions that may significantly affect the environment.⁵⁷ If an agency determines that a federal action is not

⁵⁵ See, e.g., Robin Blakeman's June 13, 2019 Comments; Rebecca Pollard's June 19, 2019 Comments.

⁵⁶ Conservation Intervenors's June 19, 2019 Comments at 2 ("[T]he EA fails to disclose sufficient information regarding the environmental impact of the [project]. FERC must either supplement the EA or prepare an [EIS].").

⁵⁷ See 42 U.S.C. § 4332(2)(C) (2012); 40 C.F.R. § 1502.4 (2019).

likely to have significant adverse effects, it may prepare an EA.⁵⁸ Additionally, the Commission's regulations state that an EA may be prepared first for major pipeline construction projects under section 7 of the NGA if the Commission believes that a proposed action may not be a major federal action significantly affecting the quality of the human environment.⁵⁹ Depending on the outcome of the EA, an EIS may or may not be prepared.⁶⁰

- 48. Commission staff undertook preparation of an EA for the Buckeye XPress Project. Commission staff's analysis contained in the EA concluded that if Columbia constructs and operates its proposed facilities in accordance with its application and the environmental conditions described in the EA (which are incorporated as applicable in the appendix to this order), approval of the Buckeye XPress Project would not constitute a major federal action significantly affecting the quality of the human environment. Consequently, because of this finding of no significant impact, there is no cause to prepare an EIS. As further discussed below, we find that the EA adequately describes the project's potential environmental impacts and the mitigation measures to address those impacts.
- 49. Two commenters, Lyndsay Tarus and Robin Blakeman, allege that public involvement and transparency are lacking in the proceeding. They request the development of the EIS, followed by public hearings, and Mrs. Blakeman specifically requests an extension of the comment period following a public hearing. As noted above, the prefiling process for the Buckeye XPress Project began on August 1, 2017, with staff's approval of Docket No. PF17-6-000. During the prefiling process, Columbia conducted three public open houses (which were attended by Commission staff) to inform the public of its planned project. Commission staff subsequently held two public scoping sessions to seek comments on environmental impacts and issued several notices to the environmental mailing list, as referenced above. After Columbia filed its

⁵⁸ See 40 C.F.R. §§ 1501.3-1501.4 (2019). An EA is meant to be a "concise public document . . . that serves to . . . [b]riefly provide sufficient evidence and analysis for determining whether to prepare an [EIS] or finding of no significant impact." *Id*. § 1508.9(a).

⁵⁹ 18 C.F.R. § 380.6(a)(3).

⁶⁰ Id.

⁶¹ In response to Mrs. Blakeman's comment that "[t]he information issued thus far on this pipeline is woefully slight – only a three page document, and it is lacking much information...," we note that the main body of the EA is 382 pages long, and totals 1,368 pages with appendices. Robin Blakeman's June 13, 2019 Comment.

application in March of 2018, Commission staff prepared the EA, which was placed into the public record on May 20, 2019, with a thirty (30) day public comment period. Given this, there has been adequate opportunity for public participation in our processing of Columbia's application.

b. **Environmental Plans**

- 50. The EA recommended, and this order requires, that Columbia develop and file, prior to commencement of construction, several plans detailing how it will address certain impacts of the project. The Conservation Intervenors however argue that it is impossible for the public to understand and comment on the potential impacts to biological resources when the Commission requires the development of mitigation measures in consultation with federal and state agencies at a later date. Likewise, the EPA recommends that we consider whether public or resource agency input on environmental plans could help achieve better outcomes. 4
- 51. In considering Columbia's proposal, Commission staff adequately disclosed and addressed the project impacts and identified appropriate measures to mitigate those impacts. The Commission must consider and study environmental issues before approving a project, but there is no requirement that all environmental concerns be definitively resolved before a project's approval is issued. NEPA does not require every study or aspect of an analysis to be completed before an agency issues its final environmental document, and the courts have held that an agency does not need perfect information before taking any action. We believe the record in this proceeding is sufficient to enable the Commission to take the requisite "hard look" at the potential environmental consequences of our action. We also note that the required pre-

⁶² These plans include the *Abandoned Mine Investigation and Mitigation Plan* (Environmental Condition 14), *Acid Mine Drainage Mitigation Plan* (Environmental Condition 15), addendum to the *Cemeteries Avoidance Plan* (Environmental Condition 24), and revised *Unanticipated Discovery Plan* (Environmental Condition 25).

⁶³ Conservation Intervenors' June 19, 2019 Comments at 13.

⁶⁴ EPA's June 13, 2019 Comments at 7 - 8.

⁶⁵ U.S. Dep't of the Interior v. FERC, 952 F.2d 538, 546 (D.C. Cir. 1992); State of Alaska v. Andrus, 580 F.2d 465, 473 (D.C. Cir. 1978), vacated in part sub nom. W. Oil & Gas Ass'n v. Alaska, 439 U.S. 922, 99 S. Ct. 303, 58 L. Ed. 2d 315 (1978) ("NEPA cannot be 'read as a requirement that complete information concerning the environmental impact of a project must be obtained before action may be taken"").

⁶⁶ See PennEast Pipeline Co., 162 FERC ¶ 61,053, at P 101 (2018).

construction plans must be filed on the record for approval by Commission staff. And all information filed as "public" will be available for immediate viewing by any interested party. In addition, we note that for certain plans that affect specific resource agency or landowner interests, Columbia is required to consult with the affected parties in preparing the mitigation plan. For example, Environmental Condition 18 requires Columbia develop a plan in coordination with the U.S. Forest Service to avoid and minimize further impacts on occupied timber rattlesnake habitat within the Wayne National Forest. Additionally, Environmental Condition 16 requires that Columbia file a plan for settlement monitoring, minimization, and mitigation associated with the Highway 32 and Wetland 545B horizontal directional drills be developed in consultation with the owners of overlying infrastructure.

2. Abandonment

- 52. The EPA requests that the Commission consider long-term effects of abandonment in-place in steep areas or at waterbodies. The EPA acknowledges the discussion in the EA regarding the potential for long-term impacts associated with abandonment due to pipe corrosion and collapse. Nevertheless, the EPA states that long-term impacts and associated protective measures were not sufficiently discussed in the EA.
- 53. Columbia has proposed to abandon in place most of the existing R-501 pipeline system. 67 As discussed in the EA, long-term effects of pipelines abandoned in-place could include minor subsidence over the pipeline from deterioration of the pipeline, which could alter ground surface and surface or subsurface water flow patterns. However, based on our staff's experience with many abandonment projects, we do not consider the potential for abandoned pipeline corrosion or collapse to pose a significant risk to water (or other) resources. Compared to abandonment in-place, the EA also explains that abandonment by removal typically can have a greater impact on the environment. Removal of major segments of the approximately 62-mile R-501 pipeline system would entail a major construction effort with activities similar to full pipeline construction, e.g., access road construction, vegetation clearing, earth disturbance and travel lane development, installation of erosion control devices, wetland and waterbody disturbance, followed by digging, cutting, removing, and hauling away of the pipe segments. Conversely, disturbance associated with Columbia's proposed abandonment would occur only in the limited areas of removal or as necessary to address site-specific issues.68

⁶⁷ See supra P 6.

⁶⁸ EA at C-50.

- 54. At the request of the Forest Service, the EA evaluated certain specific abandonment by removal alternatives that did not offer a significant environmental advantage to abandonment in place. In addition, because Columbia will purge and cap the pipeline prior to abandonment to ensure that these segments do not result in any contamination risks if any corrosion and collapse occur in the future, potential impacts from abandoning the pipeline in-place along steep areas and at waterbodies are not expected to result in any greater impacts than along the other segments of the pipeline right-of-way.
- 55. Further, the EA recommends requiring Columbia to identify any equipment or facilities to be abandoned or disturbed that may be contaminated with polychlorinated biphenyls (PCB) or asbestos-containing materials (ACM), verify that the appropriate PCB/ACM testing will be conducted on this equipment/facility, and clarify how any abandoned PCB/ACM-contaminated material will be properly disposed. This recommendation is included as Environmental Condition 12 in the appendix to this order.

3. <u>Contamination</u>

- 56. Peter Stiver, Andy Haviland, and Aaron Gene Echols II have concerns regarding spillage and leaks causing damage or contamination to forested areas and water resources. The Conservation Intervenors maintain impacts will cause surface and groundwater contamination. Alex Slaymaker specifically asks what would stop a natural disaster from causing spillage from the project. As stated in the EA, water resource contamination impacts would be adequately minimized during construction and operation by the implementation of, and the preventative measures contained in, the *Spill Prevention and Response Plan (Spill Prevention Plan)*. Natural gas is lighter than air, and so any leaks that may occur would not result in soil contamination, but would disperse upward into the air as discussed in section B.9 of the EA. In addition, Columbia is required, in accordance with PHMSA regulations, to regularly inspect and clean its pipeline to remove any residual liquids.
- 57. The EPA advocates for upfront investigation at the South Point Superfund Site and at historic mines to prevent contamination. It recommends that the Commission consider removing select portions of the pipeline to be abandoned at those sites or implement additional mitigation, such as developing a strategy to identify contamination before construction activities begin; developing training and procedures for workers to identify contamination for environmental and workers' protection; and ensuring that the

⁶⁹ *Id.* at C-50 - C-57.

 $^{^{70}}$ EA at B-34 – B-35.

⁷¹ EA at B-192.

dewatering of trenches or hydrostatic testing water being released into upland areas does not lead to contaminated water release. However, Columbia states in its comments on the EA that it no longer plans to use the South Point Superfund Site as a workspace for this project; therefore, we have not included recommendation 19 from the EA for a South Point Superfund site mitigation plan as a requirement for the project. Columbia's Environmental Construction Standards (Construction Standards) (section VI.C. page 35) and Spill Prevention Plan (section 10, page 7) include requirements for workers to be trained to respond to environmental concerns during construction and has specified best management practices to identify and address the encountering of contaminated media or spills. Both the Construction Standards and Spill Prevention Plan were included in Columbia's application filing in this proceeding and are available for review in the Commission's public eLibrary record. Environmental Condition 13 requires Columbia to file an Abandoned Mine Investigation and Mitigation Plan which outlines mine hazards and mine-related features, including measures to manage and dispose of contaminated groundwater. Environmental Condition 14 requires Columbia to file an Acid Mine Drainage Mitigation Plan setting out further measures to manage and dispose of contaminated groundwater.

- 58. As stated above, Columbia filed an update on June 19, 2019, clarifying that "it no longer proposes to use contractor yard CY-004-B at the South Point Plant location. Columbia still proposes to use contractor yard CY-005-B for pipe offloading. This site is an existing paved rail siding. No South Point Plant groundwater remediation efforts would be affected by use of the rail siding." Given that Columbia's current proposal will not affect groundwater remediation efforts, we have not included the South Point Superfund site mitigation plan as a condition of the order. The EA concludes that in consideration of Columbia's proposed measures and staff's recommendations (contained as conditions to this order, with the exception of EA recommendation 19, as discussed above), impacts associated with contamination would be adequately minimized. We agree with this conclusion.
- 59. The EPA recommends identifying other contaminated sites in the project area. EA sections B.2⁷² and B.5⁷³ discuss known contaminated sites based on database research. These sites include Main Express, which is 0.2 mile north of staging area SA-013-B in Jackson County, Ohio; Oak Hill Union Local Schools, which is 0.2 mile northwest of staging area SA-013-B in Jackson County, Ohio; and Gas-N-All Inc., which is 0.2 mile southwest of the South Point RS in Lawrence County, Ohio. The project construction will not impact these known contaminated sites.

 $^{^{72}}$ EA at B-34 – B-35.

⁷³ EA at B-131.

4. Geology

- 60. Mrs. Blakeman has concerns regarding past problems with the Mountaineer Xpress Project, ⁷⁴ alleging water quality violations, erosion, hillside slippage, and landslides. Mrs. Blakeman also refers to the June 7, 2018 Leach XPress rupture as an example of her grave concerns, arguing the explosion resulted from a landslide. Members of the Center for Biodiversity's Ignite Change Program share in the concern that Appalachia's steep terrain has caused accidental pipeline ruptures and explosions because of landslides. Furthermore, the Conservation Intervenors argue impacts on the environment result from erosion and landslides. While problems encountered on other Columbia pipeline projects in the same region could occur on future projects, as indicated in the EA, Columbia's mitigation measures describe the reduction and minimization of the potential for slope failure and the impacts associated with erosion of steeply sloping terrain.⁷⁵ Columbia will train its construction supervisors and monitors, including contractors, in the recognition and management of potential landslides. Environmental Conditions 3 and 7 of this order address the experience and qualifications required of the environmental inspectors. These requirements specify that Columbia must affirmatively state that environmental inspectors 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. We conclude that with implementation of Columbia's mitigation measures and requirements of the environmental inspectors, hillside slippage and landslide minimization have been appropriately addressed.
- 61. The Conservation Intervenors assert the EA does not fully address the risk of landslides, leading to misinformation regarding the significance of the environmental impact. We disagree. The potential for landslides is evaluated in section B.1 of the EA.⁷⁶ In particular, table B.1-4 (Features Consistent with Landslide Morphology within 500 Feet of the R-801 Pipeline) describes the distance and direction of existing landslides adjacent to the project, and, as stated in the EA, "Columbia would minimize and mitigate landslides by implementing its *Slip Mitigation Procedures*, as well as various surface and subsurface measures described in its *Construction Standards*, including waterbars, trench breakers, bleeder drains, and appropriate placement and protection to spoil piles to

⁷⁴ On December 29, 2017, the Commission issued a certificate to Columbia to modify, abandon, and replace certain facilities in West Virginia. *Columbia Gas Transmission, LLC, et al.*, 161 FERC ¶ 61,314 (2017) (Mountaineer Xpress Project).

⁷⁵ EA at B-8.

⁷⁶ EA at B-7 – B-9.

prevent downslope movement."⁷⁷ The EA concludes that with implementation of these measures, the potential project effects related to landslides would be adequately minimized and the risk of landslides would not be significant.

62. The Conservation Intervenors claim the EA does not fully address that the threat of landslides is increased by other "morphological risks of flooding and erosion," especially climate change. Floodplains and flash floods are addressed in the EA in section B.1.⁷⁸ In particular, table B.1-8 describes where the project would cross Federal Emergency Management Agency 100-year floodplains and, as stated in the EA, "Columbia would implement several mitigation measures, as needed, within floodplains to minimize potential impacts from flood events."⁷⁹ These measures include: increasing pipeline burial depth at waterbodies to 5 feet (2 feet deeper than minimum cover); using concrete coating on the pipeline to maintain negative buoyancy; installing and maintaining erosion and sediment control structures; restoring floodplain contours and waterbody banks to their pre-construction condition; and conducting post-construction monitoring to ensure successful revegetation and stable waterbody banks. In addition, two existing aboveground facilities (Symmes Valve Station and the South Point Regulator Station) and two proposed aboveground facilities (Mainline Valves 3 and 4) would be within a 100-year floodplain. However, each of these facilities would consist of limited piping components and assemblies. Therefore, as stated in the EA, 80 installation of the pipeline would not affect floodplain storage, as almost all project components would be installed subsurface, and ground surface contours would be restored following the completion of construction activities. With implementation of these measures, the potential project effects related to floodplains, morphological changes along waterbodies, and flash floods would be adequately minimized and the risk of flooding would not be significant. In addition, Columbia would construct these facilities according to county and other applicable floodplain ordinances, regulations, and permits. As described in section B.1.1 of the EA, 81 erosion of the soils is adequately addressed by Columbia's Construction Standards, which contain the mitigation measures in the Commission's Upland Erosion Control, Revegetation, and Maintenance Plan. Examples of these mitigation measures include slope breakers, trench breakers, and revegetation.

⁷⁷ EA at B-27.

 $^{^{78}}$ EA at B-17 – B-19.

⁷⁹ EA at B-19.

⁸⁰ EA at B-17.

⁸¹ EA at B-1 - B-2.

- 63. Additionally, as stated in the EA, Columbia would also implement the measures described in its Construction Standards and Landslide Mitigation Plan to reduce the potential for slope failure and minimize the impacts associated with erosion of steeply sloping terrain. 82 Prior to the start of construction, Columbia's construction supervisors and monitors, including contractors, would be trained in the recognition and management of potential landslides. Columbia would require the construction contractor to prepare a Steep Slope Work Plan for any area with slopes greater than 30 percent. The Steep Slope Work Plan measures would also include an engineering analysis that included field testing, hazard recognition and identification of soil limitations, hazards, and weather, as well as specialized compaction, backfill, and excavation methods. Some other measures Columbia would implement include installing trench plugs and/or French drains to prevent water from flowing down the trench and along the pipeline. If temporary stabilization is needed prior to permanent restoration and establishment of permanent vegetation, Columbia would use mulch, hydromulch, and/or mulch tackifiers to cover the seeding, and would use increased rates of mulch and jute netting on slopes exceeding eight percent. Columbia would re-establish pre-construction contours and drainage patterns to the greatest extent practical in disturbed work areas to reduce the potential for landslides. For these reasons, the EA concludes that potential project effects related to landslides would be adequately minimized, and the risk of landslides would not be significant. We agree.
- 64. The Conservation Intervenors state the EA does not fully address the risk of human causes of landslides. Blasting is addressed in sections A.1⁸³ and B.1.⁸⁴ The EA recommends Columbia file its final geohazard report before construction, which will identify the slopes that would require blasting, potential slope instability or movement for each slope, and measures to mitigate and monitor the sites post-construction. This recommendation is now included as Environmental Condition 15 in the appendix to this order. In addition, Columbia will require its contractor to develop a site-specific *Blasting Plan* for each location where blasting is necessary during construction of the proposed pipeline. The EA concludes with the use of Columbia's proposed measures (which include not blasting within waterbody channels without prior approval from applicable government authorities having jurisdiction and providing at least two-day notice to the Ohio Department of Natural Resources (Ohio DNR), or as specified in permits; testing for consolidated rock prior to trenching in waterbodies and wetlands where blasting evaluations are inconclusive; monitoring ground vibrations and air blast; and conducting

 $^{^{82}}$ EA at B-7 – B-9.

 $^{^{83}}$ EA at A-36 – A-37.

⁸⁴ EA at B-20.

blast analyses and surveys) and the mitigation measures included in Environmental Condition 15, potential impacts associated with blasting would be adequately minimized.

- 65. The Conservation Intervenors maintain the EA does not disclose the risk that the natural environment and geologic hazards pose on pipeline safety, so agencies cannot conclude there is no significant environmental impact. We disagree. Risks to pipeline integrity, including seismicity, soil liquefaction, landslides, subsidence, mine hazards, flood hazards, and blasting considerations are addressed in section B.1 of the EA. The EA concludes that with strict adherence to the construction standards administered by PHMSA and mitigation measures identified in Columbia's *Construction Standards*, geological hazards would not pose a significant risk to the project facilities. In addition, the EA recommends (adopted herein as Environmental Conditions 13 and 15) that Columbia file an *Abandoned Mine Investigation and Mitigation Plan* and final Geohazard Report prior to construction.
- 66. The Conservation Intervenors also state that the EA does not fully address the threat to safety regarding the proximity to underground mines. Mines in relation to the project are discussed extensively in section B.1. 86 As stated above, Environmental Condition 13 in the appendix to this order requires Columbia to file an *Abandoned Mine Investigation and Mitigation Plan* that must include the final results of Columbia's geohazard investigations pertinent to mine hazards, the results of secondary investigations to further characterize potential mine-related features (addressing the recommendations of Columbia's geotechnical contractor), and site-specific mitigation and monitoring measures Columbia will implement when crossing abandoned mine lands, including measures to manage and dispose of contaminated groundwater. Further, Environmental Condition 14 requires Columbia to file an *Acid Mine Drainage Mitigation Plan*. These conditions were recommended in the EA, which concludes that with implementation of Columbia's proposed measures and these environmental conditions, the impacts associated with mine hazards would be adequately minimized.

5. Soils

67. Herb Beamer asserts that Columbia should be monitored and should not be in direct charge of projects involving soil disturbance. Mr. Beamer further argues that Columbia should be fined for construction activities and environmental violations, including spills, and that environmental inspectors should check construction zones after rainfall events. Columbia will be subject to monitoring and inspection conducted by both

⁸⁵ EA at B-1 − B-39.

⁸⁶ EA at B-2 - B-4, B-9 - B-17.

Commission staff and the Forest Service.⁸⁷ The Commission requires environmental inspectors to assess erosion control devices within 24 hours of each 0.5-inch or greater rainfall event, with repairs required to be made within an additional 24 hours. The EA concludes that with strict adherence to the mitigation measures identified in Columbia's *Construction Standards*, impacts on soil resources from construction and operation of the project would not be significant.

6. Wetlands

68. The EPA states that the Commission should consider trenchless crossing methods for wetlands, including at the Ohio Valley Conservation Coalition site's wetlands, all Class 3 wetlands, 88 and other high-quality habitats as designated by the FWS, Ohio DNR, and Forest Service. 89 Columbia developed the proposed project to avoid wetlands where possible. In addition, Columbia proposes to use the HDD method to avoid surface impacts on six wetlands as described in EA section B.2.90 With regard to Ohio Valley Conservation Coalition parcels, Columbia evaluated trenchless crossing methods, as described in the EA.⁹¹ Columbia stated that there were risks and potential impacts associated with both trenchless HDD (e.g., inadvertent return of drilling mud and noise affecting nearby residents) and conventional bore techniques (e.g., bore pit dewatering, streambed collapse, unintentional draining of the waterbody or wetland). 92 Columbia filed additional informational for the Ohio Valley Conservation Coalition parcels on April 10, 2019, regarding HDD feasibility (including two shorter HDDs or one longer HDD), reductions in workspaces, and post-construction restoration. The HDD feasibility assessment results indicated elevated risks for inadvertent returns of drilling mud for both scenarios and effects associated with the pullback section for the longer HDD requiring temporary closure of Gallia Blackforth Road (or completing the pullback in two sections,

⁸⁷ The Energy Policy Act of 2005 amended the NGA to give the Commission authority to assess civil penalties of up to \$1 million per day per violation for violations of rules, regulations, and orders issued under the act. Energy Policy Act of 2005, Pub. L. No. 109-58, 314(b)(1)(B), 119 Stat. 594, 961 (2005).

⁸⁸ Columbia proposes to cross 4 of the 16 Class 3 wetlands using the horizontal direction drill [HDD] method.

⁸⁹ EPA's June 13, 2019 Comments on the EA at 4.

⁹⁰ EA at B-66.

 $^{^{91}}$ EA at C-47 – C-49.

⁹² *Id.* at C-48.

increasing the risk for the pipe to get stuck). Commission staff concluded in the EA, and the Commission concurs, that Columbia's proposed crossing methods are acceptable.

- 69. The EPA states the project should follow mitigation ratios specified in the Ohio Administrative Code 3745-1-54, that wetland mitigation at increased ratios should be considered, and that temporary wetland impacts due to matting should be mitigated. Wetland mitigation will be determined via permitting requirements as specified by the Army Corps and the Ohio Environmental Protection Agency (Ohio EPA), the agencies with statutory authority to establish wetland mitigation. Further, Columbia's adherence to the mitigation measures included in the Commission's *Wetland and Waterbody Construction and Mitigation Procedures* will ensure that it sufficiently minimizes temporary wetland impacts associated with matting.
- 70. The Conservation Intervenors state the EA cannot avoid disclosure of the project's impacts on wetlands, or mitigation thereof, by requiring Columbia to formulate mitigation plans after issuance of the EA and prior to construction. No wetland mitigation plans were required after issuance of the EA and Commission staff considered impacts of the Buckeye Xpress Project and Columbia's proposed mitigation in the EA. Wetlands are discussed in sections A.1,93 A.4,94 A.5,95 A6,96 A.7,97 B.198 and B.2 of the EA.99 Mitigation for impacts on these wetlands is described in section B.2 of the EA and within Columbia's filed *Construction Standards*.100 Only 0.01 acre of permanent fill would be required to operate this project. Additionally, less than one acre of forested wetland would be converted to emergent or scrub/shrub wetland as a result of the project. Therefore, the EA concludes with the implementation of Columbia's proposed construction, restoration, and mitigation measures, Commission's *Wetland and*

⁹³ EA at A-5.

⁹⁴ EA at A-11.

⁹⁵ EA at A-13.

 $^{^{96}}$ EA at A-22 – A-23.

 $^{^{97}}$ EA at A-28 – A-33, A-37.

⁹⁸ EA at B-21, B-24, B-32 – B-34, B-36.

⁹⁹ EA at B-40, B-50, B-58, B-60, B-65 -B-74.

¹⁰⁰ Columbia filed its *Construction Standards* on March 26, 2018, as part of its Application.

Waterbody Construction and Mitigation Procedures, ¹⁰¹ and Columbia's Construction Standards, adverse impacts on wetlands, resulting from the proposed project, would be adequately minimized, mitigated, and would not result in significant impacts. We agree with this conclusion. The Forest Service could require additional measures for wetland mitigation on Wayne National Forest lands, if it deems appropriate. In addition, the Army Corps may require Columbia to conduct compensatory mitigation to comply with Section 404 of the Clean Water Act (CWA) to further mitigate for the project impacts on wetlands.

7. Waterbodies

- 71. Several commenters raise the potential for waterbodies to be affected, arguing construction will dewater and cause sedimentation of streams and that construction could require in-stream blasting. Elizabeth Davis, Linda Grashoff, and Jesse Hart further argue that drinking water could be impacted. To mitigate these impacts, the EPA recommends using more dry trench or trenchless methods for crossing waterbodies instead of wet open-cut crossings.
- 72. The proposed pipeline will cross 335 surface waterbodies, 310 of which are considered minor waterbodies (equal to or less than 10 feet wide) and 25 are considered intermediate waterbodies (greater than 10 feet but less than or equal to 100 feet wide). Eleven waterbodies would be crossed via trenchless methods. No waterbodies greater than 100 feet in width would be crossed. Ephemeral and intermittent waterbodies make up 210 of the 335 total waterbodies to be crossed, which means they likely would not contain fish species at the time of construction. Columbia proposes to cross 62 of the perennial waterbodies, including all the State Resource Waters crossed by the pipeline, using a dry crossing method or a trenchless method to minimize turbidity and sedimentation associated with the stream crossings. We find Columbia's proposal to cross the remaining waterbodies using the open-cut method acceptable because, as discussed in section B.2 of the EA, under appropriate circumstances this method limits disturbance and sedimentation impacts via rapid pipe installation and restoration (less than 24 hours for minor waterbody crossings). 102 Further, although it is anticipated that there will be a need for blasting to construct the R-801 pipeline, ¹⁰³ implementation of Columbia's Blasting Plan, which includes blasting mats, the smallest appropriate

¹⁰¹ The *Wetland and Waterbody Construction and Mitigation Procedures* are available on the Commission's website at https://www.ferc.gov/industries/gas/enviro/guidelines.asp.

 $^{^{102}}$ EA at B-51 – B-64.

 $^{^{103}}$ EA at B-61 – B-62.

explosive charges, and time of year restrictions to avoid impacts on fisheries, will sufficiently mitigate impacts from such activity. We find that Columbia's proposed use of trenchless or dry crossing methods to cross other specific waterbodies and implementation of the mitigation measures outlined in Columbia's *Construction Standards* and other project-specific plans will avoid or adequately minimize impacts on surface and drinking water resources.

- 73. The EPA maintains the Commission should define adequate flow rates regarding waterbody construction crossings. The Commission's Wetland and Waterbody Construction and Mitigation Procedures in section V.B.3.e states the company must "maintain adequate flow rates to protect aquatic life, and prevent the interruption of existing downstream uses." 105 Because instream flow needs would likely vary by waterbody size, flow, habitat present, seasonal considerations, species present and their specific habitat requirements, and downstream uses (e.g., water intakes), it is not feasible to prescribe either generalized or hundreds of site-specific flow rates. Rather, the environmental inspector (in coordination with Commission staff representatives where appropriate) would use best professional judgement when evaluating flow rates. The EA concludes that impacts on surface water resources from construction and operation of the project would be temporary and insignificant with Columbia's implementation of its Construction Standards, HDD Contingency Plan, Blasting Plan, Spill Prevention Plan, and proposed construction and mitigation measures (which includes maintaining adequate flow rates). In addition, Columbia will have to obtain water withdrawal permits from Ohio EPA, an Army Corps 404 CWA Permit, and an Army Corps Section 10 permit.
- 74. The EPA contends that the Commission should demonstrate compliance with the CWA section 404 and coordination with the Army Corps regarding section 404 permitting. The Army Corps was a cooperating agency for the development of the EA and, as stated in section A.1.3 of the EA, the Army Corps would ultimately be responsible for CWA section 404 permitting and compliance. As noted in Environmental Condition 9, Columbia must file with the Commission documentation demonstrating it obtained all necessary federal permits and authorizations, including the water quality certifications (or evidence of waiver thereof), prior to receiving Commission authorization to commence construction.
- 75. The EPA comments that the Commission should consider indirect impacts on waterbodies. Indirect impacts on waterbodies, such as the effects of erosion and

¹⁰⁴ EA at B-62.

¹⁰⁵ Commission's *Procedures* at 10.

sedimentation from graded upland areas affecting downgradient waterbodies, spills of hazardous fluids, and clearing vegetation, were considered in section B.2 of the EA.¹⁰⁶

- 76. The EPA maintains that the Commission should clarify when equipment would be allowed to cross waterbodies before bridge installation, and should confirm use of the temporary bridges. The Commission's *Wetland and Waterbody Construction and Mitigation Procedures* in section V.B.5.a state "Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment." Columbia has committed to implementing these measures within its *Construction Standards*.
- 77. The Conservation Intervenors state the EA does not fully address the safety of the pipeline regarding the threat to water resources. We disagree. Potential issues related to groundwater are discussed extensively in section B.2 of the EA, ¹⁰⁸ including source water protection areas, ¹⁰⁹ groundwater protection areas, ¹¹⁰ surface water intakes, ¹¹¹ surface water protection areas, ¹¹² designated sole source aquifers, ¹¹³ public and private water supply wells, ¹¹⁴ springs, ¹¹⁵ and contaminated groundwater. ¹¹⁶ The EA recommends that Columbia file an *Abandoned Mine Investigation and Mitigation Plan*, which would include site-specific mitigation and monitoring measures Columbia would implement when crossing abandoned mine lands, including measures to manage and dispose of

¹⁰⁶ EA at B-57.

¹⁰⁷ Commission's *Procedures* at 11.

 $^{^{108}}$ EA at B-40 – B-51.

¹⁰⁹ EA at B-40.

 $^{^{110}}$ EA at B-40 – B-44.

¹¹¹ EA at B-41.

 $^{^{112}}$ EA at B-41 – B-43.

¹¹³ EA at B-45.

¹¹⁴ EA at B-45 – B-47.

¹¹⁵ EA at B-46 – B-47.

¹¹⁶ EA at B-47 – B-48.

contaminated groundwater. It also recommends the filing of an *Acid Mine Drainage Mitigation Plan* prior to construction, which would provide a detailed plan to address construction and handling procedures for acid-producing rock, soils, and groundwater that could be encountered in areas of active or previous mining activities where sulfide minerals are exposed to runoff.¹¹⁷ These two recommended conditions are included as Environmental Conditions 13 and 14 in the appendix to this order. Section B.9 and B.10 of the EA addresses safety of the pipeline while in operation and potential cumulative impacts on groundwater and surface waters, respectively.¹¹⁸ The EA concludes that based on Columbia's implementation of its proposed mitigation, *Spill Prevention Plan*, *Construction Standards*, and *Blasting Plan*, impacts on groundwater would be minor, short-term, and not significant. Further, given Columbia must construct the project in accordance with PHMSA safety regulations, the EA concluded construction and operation of the project would represent a minimal increase in risk to the nearby public.¹¹⁹

78. The Conservation Intervenors contend the EA fails to analyze the amount of sedimentation, locations of susceptible areas, how sedimentation would affect local streams, and to identify and/or adequately discuss mitigation for sedimentation impacts. The Conservation Intervenors further state the EA defers the formulation of mitigation for sedimentation, or where measures have been developed, fails to discuss and analyze their effectiveness. Sedimentation and measures designed to prevent erosion and sedimentation are discussed in various sections of the EA. The Commission's Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures, as supplemented by Columbia's Construction Standards, and other permitting requirements, include measures (i.e., the installation of temporary and permanent erosion control devices and spacing of slope breakers) that are designed to adequately minimize sedimentation during construction and operation of the project. On-site inspection during construction further allows enhancement of erosion and sediment control devices where needed on a real-time basis. The EA concludes that impacts on surface water resources from construction and operation of the project would be temporary and not significant, and Columbia would limit impacts on water resources by implementing its Construction Standards, HDD Contingency Plan, Blasting Plan, Spill Prevention Plan, and proposed construction and mitigation measures.

¹¹⁷ EA at B-16 – B-17.

¹¹⁸ EA at B-206 –B-218.

¹¹⁹ EA at B-203. The Commission notes that while this project involves Columbia will be installing larger diameter pipe, the primary driver of this project is the elimination of wrinkle bends in aging pipeline.

8. General Biology

- 79. Numerous commenters argue the project will have an impact on biodiversity. The Commission has previously stated that "[b]iodiversity is an issue only when the proposed action would have a significant [e]ffect on one population (enough to change the gene pool) or when impacts are so extensive as to change the species composition of the affected area." Neither of these situations are anticipated.
- 80. The Conservation Intervenors allege the EA does not support a finding of no significant impact with respect to biological resources. Biological resources, impacts, and impact avoidance, minimization, and mitigation measures are discussed in sections B.3¹²¹ and B.4 of the EA. ¹²² The Conservation Intervenors assert the EA avoided disclosure of the project's impact on species and mitigation by requiring Columbia to formulate mitigation plans after issuance of the EA and prior to construction. We disagree. As discussed above, the EA adequately addressed the project impacts and recommended measures to mitigate those impacts, which are required by the environmental conditions in this order. 123 Nonetheless, project development can evolve over time in coordination with stakeholders and agencies, and in an ongoing effort to enhance impact avoidance, minimization, or mitigation measures. All required plans will be filed with the Secretary for inclusion in the record, and review and approval by the Director of the Office of Energy Projects (or the Director's designee) prior to commencement of construction, as required by the environmental conditions of this order.

9. Forested Areas and Wayne National Forest

81. The EPA recommends summarizing the Commission's coordination with the Forest Service on impacts and mitigation measures related to Wayne National Forest in NEPA documents to disclose potential impacts and their significance. As stated above, the Forest Service participated as a cooperating agency in the development of the EA. As explained in the EA, the Forest Service will use the EA, as well as other supporting documentation, to consider the issuance of a special use permit authorization for the

¹²⁰ Iroquois Gas Transmission, L.P., 98 FERC ¶ 61,271, 62,081 (2002).

¹²¹ EA at B-75 - B-103.

¹²² EA at B-104 – B-124.

¹²³ Supra PP 45-46.

portion of the project on National Forest System lands.¹²⁴ As such, the Forest Service provided extensive input, review, and comments on the project proposal, including impacts and their significance. During preparation of the environmental document, the Commission staff provided the Forest Service with a copy of the draft EA, enabling the agency to provide input to the document.¹²⁵ After an independent review of the EA, the Forest Service will determine whether the analysis is sufficient for its action and it will develop its own record of decision to determine whether to approve or deny the special use permit required for the project.

- 82. Numerous commenters argue that the project could significantly affect forested areas. As stated in the EA, the project will clear 90.9 acres of interior forest habitat, which include both upland and wetland communities. This will convert 544.6 acres of interior forest habitat into edge habitat, which supports different species than interior forest. Columbia has collocated the pipeline where possible to reduce forest fragmentation and has committed to restoring areas of disturbed vegetation that are not needed for project operation after construction. With implementation of the mitigation measures outlined in Columbia's *Construction Standards* and in other project specific plans, the EA concludes that impacts on interior forest will be adequately minimized. The EPA recommends the Commission consider requiring the planting of tree saplings in the Wayne National Forest. We note that the Wayne National Forest is generally an area with adequate rainfall to actively promote natural growth and recruitment of saplings. However, the Forest Service could require additional mitigation measures on Wayne National Forest lands as part of its permitting process.
- 83. The EPA also suggests using route modifications and HDD to avoid or minimize impacts on the Wayne National Forest. Columbia has and is currently coordinating with the Forest Service regarding impact avoidance, minimization, and mitigation measures on Wayne National Forest lands. For example, Columbia's June 19, 2019 filing provides updates for routing adjustments and/or workspace modifications developed in coordination with the Forest Service for several resource areas including the Dry Ridge

¹²⁴ On August 9, 2019, the Forest Service issued its draft decision notice and finding of no significant impact for its intended authorization of the use and occupancy of National Forest System lands for the Buckeye XPress Project. Robert Lueckel, *Draft Decision Notice and Finding of No Significant Impact*, U.S DEPARTMENT OF AGRICULTURE 1 (Aug. 9, 2019), https://www.fs.usda.gov/nfs/11558/www/nepa/109859_FSPLT3_4692164.pdf.

¹²⁵ Cooperating agencies are exempt from the Commission's ex parte regulations in order to allow for the free-flow of information necessary between the cooperating agency and the Commission. 18 C.F.R. § 385.2201(e)(1)(v) and § 385.2201(g)(1) (2019).

Crossover, the McClure Mound Route Modification, and the Blue Ridge Special Area modification. Columbia is currently in discussions with the Forest Service regarding these route modifications. Should Columbia be able to meet all the requirements of the provision, Columbia would be able to propose route adjustments to the Commission pursuant to Environmental Condition 5 of this order. The Forest Service could also require route changes or mitigation measures it deems necessary on Forest Servicemanaged lands as part of its permit issuance and final *Construction, Operation, and Maintenance Plan* (COM Plan). We note that a draft COM Plan that Columbia would implement on Wayne National Forest lands was included in the EA as Appendix A-12. Columbia and the Wayne National Forest continue to refine the draft COM Plan, which will include additional mitigation for vegetation communities on Wayne National Forest lands, if appropriate.

- 84. Several commenters oppose crossing the Wayne National Forest (including issuance of a special use permit) and express concern about impacts on the Bluegrass Ridge Special Area. One commenter suggests that the existing pipeline should be decommissioned and if possible, removed, and also argues for a new route that does not encroach on national forests. The Bluegrass Ridge Special Area is discussed in sections B.3, ¹²⁷ B.10, ¹²⁸ and C.3 of the EA. ¹²⁹ Pipeline removal and two alternative routes that would avoid the Wayne National Forest are considered in section C of the EA. However, as discussed in the EA, these alternatives would not provide a significant environmental advantage and would in fact increase impacts on resources; therefore, the EA did not consider these alternatives further.
- 85. The Conservation Intervenors contend the EA cannot avoid disclosure of the project's impacts on special management areas, including the Bluegrass Ridge Special Use Area or mitigation thereof by requiring Columbia to formulate mitigation plans after issuance of the EA and prior to construction. Sections B.3 and C of the EA disclose information and considerations regarding the Bluegrass Ridge Special Area, including its location, acreage of impact, alternatives to crossing this area, and mitigation measures to limit impacts (e.g., implementation of the *Construction Standards*). Further, as recommended in the EA, and included as Environmental Condition 26 in the appendix to this order, Columbia is required to file a plan to avoid or minimize impacts on sensitive habitats in the Bluegrass Ridge Special Area to the extent feasible, developed in

¹²⁶ Environmental Condition 5 allows Columbia to request approval of certain route realignments and facility location changes.

¹²⁷ EA at B-76 – B-79, B-87, B-95.

¹²⁸ EA at B-223 – B-225.

 $^{^{129}}$ EA at C-32 – C-35, C-57.

consultation with and approved by the Forest Service. Columbia filed an update on June 18, 2019, stating that it met with Forest Service staff and is developing a potential centerline shift and workspace modification designed to avoid the special use area. Columbia may request a variance within Wayne National Forest after completing surveys and determining if the shift would minimize impacts on sensitive resources. Even without the route shift, the EA concludes that with implementation of Environmental Condition 26, impacts on the Bluegrass Ridge Special Use Area will not be significant. We agree.

86. The Conservation Intervenors state the project is inconsistent with and would violate the terms and components of the Wayne National Forest's management plan, including the forest plan's 50-acre utility disturbance upper limit and wetland disturbance prohibition, the forest plan's special use areas protections, and the forest plan's future old forest protections, as well as impacting roadless areas inventoried in the Wayne National Forest's pending plan revision process. We note that the Forest Service was a cooperating agency in the development of the EA and Columbia has consulted extensively with the Forest Service regarding the proposed Wayne National Forest crossing during the pre-filing process and application review. The Forest Service will determine the adequacy of Columbia's proposal to cross its lands and issue a separate decision document on whether to approve the special use permit required for project construction through the Wayne National Forest. In accordance with Environmental Condition 9, Columbia must obtain all federal authorizations, or evidence of a waiver thereof, prior to construction of any segment of the project.

10. <u>Vegetation and Plant Species</u>

- 87. Stephen-Connie Caruso recommends using landscapers to restore indigenous flora as a remedy to stop the growth of non-native species, as opposed to using chemical herbicides, such as glyphosate. Herbicides are discussed in section B.3 of the EA and can be an effective tool in controlling invasive vegetation species. As discussed in the EA, Columbia would only use federally and state agency-approved herbicides. Further, the Commission's *Wetland and Waterbody Construction and Mitigation Procedures* restrict herbicide use within 100 feet of a wetland and waterbody unless specifically permitted by the state agency or land managing agency.
- 88. Several commenters are concerned with rare plant species, such as the juniper sedge, bigtree plum, Virginia ground cherry, Cumberland sedge, and Carolina thistle, because the project crosses the Bluegrass Ridge Special Area between mileposts 47.9 and 49.0. As noted above, Environmental Condition 26 in the appendix to this order requires Columbia to file a plan developed in consultation with and approved by the Forest

¹³⁰ EA at B-89.

Service to avoid or minimize impacts on sensitive habitats in the Bluegrass Ridge Special Area to the extent feasible. We note that the juniper sedge, Virginia ground cherry, and Cumberland sedge, addressed in the EA as occurring in the Blue Ridge Special Area, are no longer on Ohio's rare plants list. 132

- 89. The Conservation Intervenors state the EA cannot avoid disclosure of the project's impacts on state-listed plant species, or mitigation thereof, by requiring Columbia to formulate mitigation plans after issuance of the EA and prior to construction. We note as discussed in section B.4 of the EA, ¹³³ the state-listed plants that Ohio DNR recommended surveys for were not in areas that would be directly affected by the proposed project. Columbia has committed to install exclusion/silt fencing around the state-listed rare plant species identified adjacent to the construction right-of-way and to coordinate with the Ohio DNR regarding potential additional mitigation measures. The EA concludes the project would not significantly affect state-listed species, including plants.
- 90. The Conservation Intervenors state the EA cannot avoid disclosure of the project's impacts on vegetation communities in the construction right-of-way, or mitigation thereof, by requiring Columbia to formulate mitigation plans after issuance of the EA and prior to construction. The Conservation Intervenors also state the EA fails to address long-term impacts from conversion of mature forest to herbaceous cover. Interior forest, ¹³⁴ vegetation communities of special concern, ¹³⁵ general and community-specific impacts on vegetation, ¹³⁶ and mitigation for impacts on vegetation resources, ¹³⁷ Wayne National Forest-specific vegetation impacts, ¹³⁸ and noxious and invasive weeds ¹³⁹ are

¹³¹ EA at B-76, C-32.

¹³² Ohio Department of Natural Resources, 2018-2019 Rare Plants of Ohio List, http://naturepreserves.ohiodnr.gov/rareplants (last visited Jan. 8, 2020).

¹³³ EA at B-112, B-120 – B-122.

¹³⁴ EA at B-75, B-85.

 $^{^{135}}$ EA at B-75 – B-78.

 $^{^{136}}$ EA at B-78 – B-84.

¹³⁷ EA at B-86.

 $^{^{138}}$ EA at B-87 – B-88.

¹³⁹ EA at B-89.

addressed in the EA. The EA concludes that based on the types and amounts of vegetation affected by the project and Columbia's proposed avoidance, minimization, and mitigation measures to limit project impacts, impacts on vegetation would not be significant.

91. The EPA and FWS recommend considering planting pollinator-friendly species in all areas, and avoiding monarch butterflies by not mowing in September. As stated in section B.3 of the EA: ¹⁴⁰

Several commenters including EPA requested that Columbia consider seeding with pollinator-friendly species. However, Columbia indicated that standard maintenance of the permanent right-of-way such as periodic mowing, would disturb pollinator species. Columbia would be required by the [the Commission's Plan and Procedures] at section V.D.3 to seed areas in accordance with written recommendations provided by land managing agencies or landowners, and would be required to include pollinator-friendly species if requested by those entities.

Accordingly, under the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan*, the Forest Service or other landowners/land managers could request the use of pollinator-friendly species if desired. Regarding the EPA and FWS recommendation to prohibit September mowing, the leading controllable cause within the United States which contributes to monarch butterfly declines is lack of milkweed to feed upon. Columbia's performance of right-of-way maintenance activities is restricted to between August 2 and April 14th and can occur only once every three years. ¹⁴¹ Given the low frequency of the activity, limited area of maintenance activity (the maintained right-of-way for this project would be 50 feet wide), and maintenance of the right-of-way creating area for milkweed to grow, we conclude vegetation maintenance would not have an appreciable impact on milkweed availability for the monarch. However, the right-of-way maintenance activities are required by the DOT as a matter of safety to ensure ease of right-of-way access in the event of an emergency and limit

¹⁴⁰ EA at B-84.

¹⁴¹ As required by the *Upland Erosion Control, Revegetation, and Maintenance Plan*, Columbia cannot conduct vegetation mowing or clearing over the full width of the permanent right-of-way in uplands more frequently than every 3 years. In addition, as also required in the *Upland Erosion Control, Revegetation, and Maintenance Plan*, Columbia cannot perform vegetation maintenance between April 15 and August 1 of any year unless specifically approved by the resource agencies. These standard limitations were developed, in consultation with the FWS, to protect wildlife species that are not to avoid the clearing disturbance during the nesting season.

pipeline encroachment by third parties as this is a leading cause of pipeline failures. We conclude that further limiting the already short time frame available for such activities in an area where winter weather can also prevent maintenance for significant periods of time, particularly given the steep slopes in the area, would make it difficult for the pipeline company to conduct its right-of-way clearing as required by DOT.Wildlife

11. Wildlife

- 92. Numerous commenters are concerned that the disturbance of large areas of unfragmented forest would cause permanent effects on forest-dwelling species, such as migratory birds, and to important bird areas. The EA concludes that based on the characteristics and habitat requirements of migratory birds known to occur in the proposed project area, the amount of similar habitat adjacent to and in the vicinity of the project, and implementation of Columbia's *Construction Standards*, construction and operation of the project would not have significant impacts on migratory bird populations.
- 93. The EA also concludes that although individuals of some wildlife species could be affected by construction and operation of the project, with potentially long-term to permanent direct and indirect effects in areas where interior forest would be removed, the overall project effects would primarily be temporary and minor. Because of: (1) collocation with and revegetation of rights-of-ways; (2) presence of habitats similar to those that would be disturbed during construction near the project area that displaced wildlife could occupy; and (3) Columbia's proposal to implement avoidance and minimization measures, we agree that the project would have insignificant impacts on wildlife and habitats.
- 94. The Conservation Intervenors also maintain the EA's conclusion that migratory birds will not be significantly impacted is unsupported. We disagree. As addressed in section B.3 of the EA, ¹⁴² tree-felling restrictions associated with bats would also serve to minimize impacts on migratory birds. The EA states following these restrictions would minimize disturbance in forested areas during about 60 percent of the migratory bird critical nesting period (April 15 through August 1) on lands covered by Columbia's *Multi-Species Habitat Conservation Plan (Habitat Conservation Plan)* and avoid disturbance throughout the entire migratory bird critical nesting period on lands not covered by the plan. Migratory birds that nest on the ground or in shrubs in non-forested areas, such as the golden-winged warbler, Henslow's sparrow, and prairie warbler, all of which are birds of conservation concern, would not necessarily be protected by these tree-clearing restrictions. However, Columbia would conduct pre-construction vegetation clearing outside of the nesting seasons for such species, where feasible. In areas where

¹⁴² EA at B-102 – B-103.

vegetation clearing would be conducted during the migratory bird-nesting season due to project schedule constraints, pre-construction activities along the right-of-way, such as equipment noise and materials staging, may discourage birds from nesting in the right-of-way and prevent them from being harmed during construction. To reduce impacts on ground nesting birds during the operational life of the project, Columbia would not perform routine vegetation maintenance clearing during the general nesting season, between April 15 and August 1, in accordance with its *Construction Standards*. The EA concludes that based on the characteristics and habitat requirements of migratory birds known to occur in the proposed project area, the amount of similar habitat adjacent to and in the vicinity of the project, and Columbia's implementation of its *Construction Standards*, construction of the project would not have significant impacts on migratory bird populations. Therefore, we conclude the EA's conclusion regarding impacts on migratory birds is supported.

- 95. Several commenters express concern about potential impacts on general wildlife and its habitat. Wildlife and its habitats are discussed in sections B.3¹⁴³ and B.4 of the EA.¹⁴⁴
- 96. The FWS states it is involved with the Cackley Swamp Preserve, ¹⁴⁵ that impacts to it should be avoided and minimized to extent feasible, and that Columbia should develop a habitat plan. The project pipeline replacement crossing of the Cackley Swamp Preserve (between mileposts (MP) 25.5 and 26.0), owned by the Appalachia Ohio Alliance, would be collocated with Columbia's existing pipeline, and abandonment activities would be limited to the existing right-of-way as discussed in EA section B.5.¹⁴⁶ The project would also cross the Cackley Swamp Preserve at MP A23.5-A23.8, MP 24.8-25.0, and MP D1.1, but surface disturbance in these areas would be avoided by Columbia's proposed HDD crossing method. Construction within the swamp between MP 25.5 and 26.0 would affect 7.4 acres, including some tree clearing. Trees in about 4.6 acres of this 7.4 acres would be allowed to regrow and return to forest vegetation following construction of the project. While there would be a permanent loss of 2.8 acres of trees during operation of

¹⁴³ EA at B-93 – B-103.

¹⁴⁴ EA at B-104 – B-124.

¹⁴⁵ Cackley Swamp was purchased by the Appalachia Ohio Alliance through a grant from FWS. Appalachia Ohio Alliance, *Cackley Swamp*, http://www.appalachiaohioalliance.org/conservation/cackley-swamp/ (last visited Jan. 9, 2020).

¹⁴⁶ EA at B-133 – B-134, B-137 – B-138, B-140.

the project in the Cackley Swamp Preserve, the overall impact of the project would be minor.

12. Threatened and Endangered, Sensitive Species

- 97. The Conservation Intervenors allege the EA fails to demonstrate that the project complies with the Endangered Species Act (ESA). Species listed under the ESA are addressed in detail in section B.4¹⁴⁷ of the EA. Commission staff concluded in the EA that ESA consultation was complete, except for consultation on the running buffalo clover, and included a recommendation that construction not begin until the Commission concludes ESA consultation with the FWS on that species. Any potential impacts on running buffalo clover would require additional consultation because that species is not covered under Columbia's Habitat Conservation Plan. Columbia conducted running buffalo clover surveys along the project corridor in 2017 and 2018. Although suitable habitat for running buffalo clover was documented during Columbia's 2017 and 2018 surveys, no plants were observed. In its June 20, 2019 comments, the FWS states running buffalo clover was not found in Columbia's 2019 project surveys and the FWS agrees with the survey report. In an August 21, 2019 filing, the FWS concurred with the EA's conclusion that the project is not likely to adversely affect the running buffalo clover and consultation for ESA listed species is complete. Therefore, we have not included environmental recommendation 20 from the EA within this order.
- 98. Many commenters argue that the project would impact bats in the project area. Bats are discussed in section B.4 of the EA, ¹⁴⁸ with impact avoidance, minimization, and mitigation measures detailed in section B.4. ¹⁴⁹ The EA concludes that given Columbia's commitment to adhere to the avoidance and mitigation measures for the Indiana bat and the northern long-eared bat on lands not covered by the consultation process in Columbia's *Habitat Conservation Plan*, the project is *not likely to adversely affect* the Indiana bat or the northern long-eared bat in those areas. In correspondence dated June 1, 2018, the FWS concurred that implementation of the Indiana bat and northern long-eared bat-related avoidance and minimization measures required by the Habitat Conservation Plan, including tree clearing restrictions, would be sufficient to confirm a determination that the project is not likely to adversely affect the Indiana bat or the northern long-eared bat on land not covered by the *Habitat Conservation Plan* consultation process. The FWS considers ESA section 7 consultation complete for the Indiana bat and the northern

¹⁴⁷ EA at B-104 – B-112.

¹⁴⁸ EA at B-104 – B-112.

¹⁴⁹ EA at B-107 –B-109.

long-eared bat with Columbia's implementation of the avoidance and minimization measures.

- 99. The Conservation Intervenors also state NEPA requires collection of baseline data as to the occurrence of species prior to project approval. In addition, several commenters mention potential impacts on habitat for endangered species. Federally and state-listed endangered species are discussed in section B.4 of the EA. The EA contains a summary of extensive data on environmental resources, including existing vegetation resources, aquatic resources, wildlife resources, migratory birds, and federally threatened and endangered species, as well as other special status species, she based on information included in Columbia's application. The EA states Columbia conducted habitat assessment surveys in coordination with the Ohio DNR and the FWS, she which indicates that the Indiana bat, northern long-eared bat, and running buffalo clover could occur within range of the project.
- 100. Columbia also completed surveys for regional forester sensitive species within the Wayne National Forest. The EA concludes that the project would have no impacts on nine of the forty-eight species designated as regional forester sensitive species and would not "be likely to cause a trend toward federal listing or loss of viability for the remaining thirty-nine species designated as [regional forester sensitive species]."
- 101. Columbia also conducted surveys for several state-listed threatened and endangered species. Numerous commenters had concerns about impacts on the state-listed timber rattlesnake. In the June 20 and August 21, 2019 comments, the FWS supports a reroute to avoid timber rattlesnake habitat. We conclude that disclosure of impacts on sensitive wildlife species, including the timber rattlesnake, has been included

¹⁵⁰ EA at B-104 - B-124.

¹⁵¹ EA at B-75 – B-90.

¹⁵² EA at B-90 – B-93.

¹⁵³ EA at B-93 – B-103.

 $^{^{154}}$ EA at B-100 - B-103.

¹⁵⁵ EA at B-104 – B-112.

¹⁵⁶ EA at B-104.

¹⁵⁷ EA at B-120 – B-121.

in the EA, as discussed in EA section $B.4^{158}$ and no significant impacts on this species are anticipated.

102. The EA includes recommended conditions 21 and 22, now included as Environmental Conditions 18 and 19 herein, which requires Columbia to file a mitigation plan for the timber rattlesnake and biological surveys and reports for Kirtland's snake and eastern spadefoot; and a planned approach for protecting state-listed species developed in consultation with the Ohio DNR, Wayne National Forest, and Forest Service (where applicable). With implementation of these conditions, the EA concludes that the project would not significantly affect state-listed species.

13. Land Use

- 103. David Lipstreu and Mr. Krichbaum specifically contend that siting the project in a national forest is a violation of "the public trust doctrine" and contrary to the best interests of the public. Steven Krichbaum questions why the project pipeline corridor needs to be increased.
- 104. We evaluated the Buckeye XPress Project under the requirements of the NGA and found that construction and operation of the proposed project with our required measures would be in the public convenience and necessity. Regarding the size of the corridor, Commission staff considered use of the lift and lay method, ¹⁵⁹ which would enable re-use of the existing pipeline corridor without increasing the right-of-way width in section C of the EA, but concluded that this alternative would not be feasible because use that method would require an extended service outage. Through the Forest Service's Special Use Permit, it will determine the applicability of using its lands for the installation of a pipeline. However, we note that this is a replacement project, and Columbia's existing pipelines already cross the Wayne National Forest.
- 105. Columbia asserts a 50-foot-wide permanent right-of-way, with 50 feet of separation from other adjacent pipelines, is needed for employee safety, for pipeline integrity, due to steep terrain, for construction schedule and efficiency, and for landowner considerations. Columbia asserts in its EA comments that in areas with slopes at or greater than 15 percent, 50 feet of separation between pipelines is needed to ensure construction safety, to move grade material, for trenching, and to prevent undermining of the existing pipeline. Columbia provides supporting data that indicates slopes at or

¹⁵⁸ EA at B-114 – B-115.

¹⁵⁹ The lift and lay method require the pipeline operator to purge the natural gas from a section of pipe, removal of the pipe, and install of the new pipe within the same ditch. This method makes it difficult to maintain natural gas service supplies while the pipeline segment is replaced.

greater than 15 percent "are scattered somewhat evenly throughout the entire length of the pipeline alignment." Columbia argues that if the Commission were to allow 50 feet of separation at steep slopes but required a 25-foot offset at flat or more gently sloping areas (i.e., slopes less than 15 percent), this would create numerous shifts in the alignment. Additionally, Columbia states that field bends and fittings along with new additional temporary workspace would be needed at the transitions between the 25- and 50-foot offsets. Further, Columbia states that a 50-foot offset could still be needed at some slopes of less than 15 percent based on site-specific conditions such as slope stability issues, subsurface geology, and manmade or natural features (e.g., waterbodies or wetlands). Therefore, Columbia requests that the Commission approve its proposed use of a 50-foot offset throughout its proposed pipeline replacement. Commission staff did include a recommendation in the EA to increase the overlap of existing rights-of-way and to limit Columbia expansion of the permanent right-of-way width. However, in light of the supporting information that Columbia filed in response to the EA's recommendation, and considering this project has been proposed because of safety concerns with wrinkle bends, and that Columbia would conduct blasting to install the new pipeline, we agree that authorization of Columbia's proposed 50-foot offset is appropriate and are not adopting the EA's recommendation on this issue.

14. Recreation

106. Multiple commenters express concern about the project's potential impacts on biking, hiking, and horsebacking riding trails (specifically the Vesuvius Main Loop Trail), and the Wayne National Forest's recreational value. As discussed in section B.5 of the EA, Columbia will work with the Forest Service to alert the public of any trail closures, install safety fencing and signs or position personnel at the crossing to assist trail users. The EA concludes that the project's cumulative impact on recreation and trails within the Wayne National Forest would be relatively minor because the majority of the proposed R-801 pipeline would be collocated with existing corridors and the construction disturbance would be temporary. We agree.

15. Visual Resources

107. Mr. Echols contends the project would cause "another scar across our state." Jasper Mitchin alleges adverse visual impacts because of tree clearing along a trail near Lake Vesuvius and Mr. Haviland maintains the project will cause a blemish on the Wayne National Forest's natural beauty. As described in the visual resources section in B.5 of the EA,¹⁶¹ the project could alter existing visual resources in three ways:

(1) construction activity and equipment may temporarily alter the viewshed; (2) lingering

 $^{^{160}}$ EA at B-148 – B-149.

¹⁶¹ EA at B-149 – B-153.

impacts along the proposed right-of-way from clearing during construction could alter existing vegetation patterns; and (3) aboveground facilities would represent permanent alterations to the viewshed. The significance of these visual impacts would depend on the quality of the viewshed, the degree of alteration of that view, the sensitivity or concern of potential viewers, and the perspective of the viewer. The majority of the land traversed by the project replacement portion consists of rolling hills with a mix of forested areas (53 percent), open land (22 percent), and agricultural land (16 percent). The EA concludes that visual resource impacts from the project replacement and abandonment would mainly be limited to the addition of equipment and personnel within the existing permanent rights-of-way during construction, as well as areas of ground disturbance within the proposed replacement construction right-of-way. After construction, these areas would be revegetated. Areas of exposed pipe would be removed. Therefore, visual impacts for the project replacement and abandonment would be long-term permanent in forested areas but minor.

108. Aboveground facilities associated with a proposed mainline valve could affect views for four nearby homes and a church, as well as along Deering Bald Knob and Sugar Creek-Johnstown Roads. Trees and vegetation would partially screen the mainline valve's chain link fence and aboveground piping, which would not exceed eight feet tall. The EA concludes that in consideration of these factors and because Columbia committed to coordination with landowners near mainline valves to address potential concerns regarding visual impacts (though no comment letters about this topic from concerned landowners have been filed to date), visual impacts would be adequately minimized.

16. Noise Impacts

109. The EPA requests a definition of a regulation run and its potential impacts. A "regulation run" is typically associated with a pressure regulation valve that is used to control pressure in a pipeline system and to prevent spikes of high pressure, especially where a pipeline may enter/exit a compressor station. A regulation run is usually constructed in a manner that involves the pipeline emerging from the ground in a "U" shape. As stated in section B.8 of the EA, "there would be minimal noise associated with operation of the regulation run within the fence line of Columbia's existing Ceredo Compressor Station in Wayne County, West Virginia." As the regulation run would be installed within the existing compressor station, it would be consistent with the existing visual impacts associated with the compressor station. No additional impacts are anticipated as a result of this facility.

17. Cultural Resources

110. In its June 6, 2019 comments, the Ohio SHPO states that it is continuing consultation with Columbia regarding historic properties and mitigation measures. The Ohio SHPO also indicates that a formal agreement for mitigation measures might be

necessary. Cultural resource issues are discussed in section B.7 of the EA. ¹⁶² The EA concludes that in consideration of Columbia's proposed measures and staff's recommendations, impacts associated with cultural resources would be adequately minimized. We agree with this conclusion. In addition, the EA states that in January 2019, Columbia filed a *Cemeteries Avoidance Plan* to avoid an inadvertent disturbances to ten cemeteries and one memorial along the project corridor, and submitted it to Ohio DNR. ¹⁶³ The EA recommended that Columbia file an addendum to the *Cemeteries Avoidance Plan*. ¹⁶⁴ On September 30, 2019, Columbia filed a revised *Cemetery Avoidance Plan* along with the SHPO's letter of concurrence. Given that Columbia has filed all the documents required in Environmental Recommendation 25 from the EA, we have not included this recommendation as a condition of the order.

- 111. In comments filed June 18, 2019, a representative of the Delaware Nation states its objections to projects that would disturb or destroy National Register of Historic Placeseligible sites. The representative does not, however, allege that the proposed project would destroy or disturb any sites. The representative requests copies of survey and SHPO reports, and states that consultation should occur with the Delaware Nation, Delaware Tribe of Indians, and Stockbridge Munsee Band of Mohican Indians.
- 112. In comments filed June 19, 2019, the Cherokee Nation states it does not foresee any impacts to its resources and requests additional consultation if cultural resources are encountered. According to Columbia's updated *Unanticipated Discoveries Plan for Cultural Resources and Human Remains* filed on June 19, 2019, the Commission would be responsible for contacting tribes as appropriate. Tribal consultation is described in section B.7 of the EA.¹⁶⁶

¹⁶² EA at B-161 –B-170.

¹⁶³ *Id.* at B-162.

¹⁶⁴ An addendum was necessary to address Ohio SHPO's concerns about how the boundaries of small or family cemeteries with missing headstones would be defined and the Wayne National Forest's recommendation that the cemetery buffer sizes be increased on Wayne National Forest lands. *Id*.

¹⁶⁵ Erin Thompson's June 18, 2019 Comments.

¹⁶⁶ EA at B-165 – B-169.

18. Air Quality

113. The EPA recommends that Columbia reduce construction emissions, limit idling time, and use only equipment manufactured after 2010. As stated in section B.8 of the EA.¹⁶⁷

Columbia has identified additional mitigation measures and on-site management practices to minimize construction combustion emissions, including implementing vehicle idling reduction policies and properly maintaining construction equipment as required by state motor vehicle inspection and maintenance program rules (e.g., [Ohio Administrative Code] Chapter 3745-26). The EPA request[s] that Columbia implement various techniques for minimizing construction emissions for on-road and non-road vehicles and equipment contained within the EPA's Construction Emission Control Checklist. Columbia did not commit to requiring its cont[r]actor to use this checklist, but did state it would recommend that the contractor use equipment that was manufactured after 2010 or has been retrofitted to minimize exhaust emissions.

114. The EA concludes that air emissions from the project replacement portion would result in localized minor, intermittent, and temporary impacts but would not affect regional air quality or result in any violation of applicable ambient air quality standards. As stated in the EA, estimated construction air emissions for the abandonment component would result in localized minor, intermittent, and temporary impacts but would not affect regional air quality or result in any exceedance of applicable ambient air quality standards.

19. Public Health and Safety

115. Linda Nieman, Troy Lampenfeld, and the Conservation Intervenors assert that the project would harm public health and safety. Mrs. Grashoff and Rudolph Pataro allege threats and endangerment to the rural communities as a result of the project. The EA addresses safety of the project in section 9. The EPA recommends Columbia update the traffic control plan to address children's safety. Columbia's *Traffic Control Plan*

¹⁶⁷ EA at B-174. In the case of Buckeye Xpress Project, compliance with the EPA's Construction Emission Control Checklist is voluntary. Compliance is only required when General Conformity is triggered, which is not the case here.

¹⁶⁸ EA at B-202.

considers topics relevant to children's safety including school zones, residential areas, and pedestrian crosswalks. Therefore, we do not find that an update is necessary.

- 116. The Conservation Intervenors also state the EA does not support a finding of no significant impact with respect to pipeline safety. Safety is discussed in section B.9 of the EA¹⁶⁹ and is a primary reason for this project (i.e., replacing pipeline with wrinkle bends). Further, the project must be constructed and operated in compliance with PHMSA's safety regulations, which are the federal standard for safety of FERC jurisdictional pipeline projects across the United States.
- 117. The Conservation Intervenors state replacing the aged pipeline will not necessarily make the project safer. The EA describes that both the R-500 and R-501 pipelines were installed in the 1940s with wrinkle bends, an artifact of decades old construction practices that can weaken the strength of the pipe, potentially causing issues with reliability and safety. Replacement of pipe with wrinkle bends is required by PHMSA regulations. ¹⁷⁰

20. Natural Gas Production

Several commenters oppose the production of natural gas in the Wayne National Forest and raise concerns related to impacts on wildlife and the environment due to fracking of natural gas and climate change. Other commenters express their preference for renewable energy sources. We note that renewable energy sources would not meet the project purpose and need; therefore, they are not addressed further. Peter Boyer specifically alleges that construction would damage the ability of the Wayne National Forest to sequester carbon and emit oxygen and clean pollutants from the surrounding air and water. In accordance with Columbia's Construction Standards, and in compliance with the Commission's Upland Erosion Control, Revegetation, and Maintenance Plan and Wetland and Waterbody Construction and Mitigation Procedures, restoration of the right-of-way would be required, which would ensure that the right-of-way would be revegetated. This includes allowing trees to grow on the temporary right-of-way, which would minimize impacts on carbon sequestration and allow the area to emit oxygen. Columbia's proposed Buckeye XPress Project does not include any production activities. Furthermore, the Forest Service would have to permit any natural gas production within the Wayne National Forest. We also note the primary purpose of this project is to replace existing facilities, not to serve new demand.

¹⁶⁹ EA at B-192 – B-203.

¹⁷⁰ EA at A-5.

21. Indirect Impacts

- 119. Indirect effects are defined as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Accordingly, to determine whether an impact should be studied as an indirect impact, the Commission must determine whether it is: (1) caused by the proposed action; and (2) reasonably foreseeable. 172
- 120. With respect to causation, "NEPA requires 'a reasonably close causal relationship' between the environmental effect and the alleged cause"¹⁷³ in order "to make an agency responsible for a particular effect under NEPA[.]"¹⁷⁴ As the Supreme Court explained, "a 'but for' causal relationship is insufficient [to establish cause for purposes of NEPA]."¹⁷⁵ Thus, "[s]ome effects that are 'caused by' a change in the physical environment in the sense of 'but for' causation," will not fall within NEPA if "the causal chain is too attenuated."¹⁷⁶ Further, the Court has stated that "where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect."¹⁷⁷

¹⁷¹ 40 C.F.R. § 1508.8(b) (2019).

¹⁷² See id.; see also id. § 1508.25(c).

¹⁷³ U.S. Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004) (Pub. Citizen) (quoting Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983)).

¹⁷⁴ Pub. Citizen, 541 U.S. at 767.

¹⁷⁵ *Id.*; see also Sierra Club v. FERC, 827 F.3d 36, 46 (D.C. Cir. 2016) (Freeport LNG) (finding that the Commission need not examine everything that could conceivably be a but-for cause of the project at issue); Sierra Club v. FERC, 827 F.3d 59, 68 (D.C. Cir. 2016) (Sabine Pass LNG) (recognizing that the Commission's order authorizing the construction of liquefied natural gas export facilities is not the legally relevant cause of increased production of natural gas).

¹⁷⁶ Metro. Edison Co., 460 U.S. at 774.

¹⁷⁷ *Pub. Citizen*, 541 U.S. at 770; *see also Freeport LNG*, 827 F.3d at 49 (affirming that *Public Citizen* is explicit that the Commission need not consider effects, including induced production, that could only occur after intervening action by the DOE);

121. Courts have found that an impact is reasonably foreseeable if it is "sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision."¹⁷⁸ Although NEPA requires "reasonable forecasting,"¹⁷⁹ an agency "is not required to engage in speculative analysis"¹⁸⁰ or "to do the impractical, if not enough information is available to permit meaningful consideration."¹⁸¹

a. <u>Indirect Impacts of Upstream Natural Gas</u> Development

- 122. The Conservation Intervenors argue that while the EA calculates the direct emissions of construction and operation of the Buckeye XPress Project, it makes no effort to assess upstream GHG emissions associated with the expansion project. The Conservation Intervenors maintain that Commission staff must attempt to "predict the number and location of any additional wells that would be drilled as a result of production demand created by the [p]roject." The Conservation Intervenors further argue even if such information is unavailable, the Commission could still estimate upstream GHG emissions based on the volume of gas.
- 123. Here, the specific source of the incremental volumes of natural gas capable of being transported via the Buckeye XPress Project is currently unknown and will likely change throughout the project's operation. The documents provided by Columbia do not reflect information to determine the origin of the future gas that may be transported on the pipeline. As we have previously concluded in other natural gas infrastructure proceedings and affirm with respect to the Buckeye XPress Project, the environmental effects resulting from natural gas production are generally neither caused by a proposed

Sabine Pass LNG, 827 F.3d at 68 (same); EarthReports, Inc. v. FERC, 828 F.3d 949, 956 (D.C. Cir. 2016) (same).

¹⁷⁸ EarthReports, Inc. v. FERC, 828 F.3d 949, 955 (D.C. Cir. 2016) (citations omitted); see also Sierra Club v. Marsh, 976 F.2d 763, 767 (1st Cir. 1992).

¹⁷⁹ N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1079 (9th Cir. 2011) (quoting Selkirk Conservation Alliance v. Forsgren, 336 F.3d 944, 962 (9th Cir. 2003)).

¹⁸⁰ Id. at 1078.

¹⁸¹ *Id.* (quoting *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1014 (9th Cir. 2006) (internal quotation marks and citation omitted)).

¹⁸² Conservation Intervenors' Comments at 4.

pipeline project nor are they reasonably foreseeable consequences of our approval of an infrastructure project, as contemplated by CEQ regulations, where the supply source is unknown. Thus, the Commission will not engage in a conjectural analysis as to whether it is theoretically possible for there to be a certain number of production wells in a specific location based upon the Buckeye XPress Project. Such theory does not satisfy NEPA's requirement of "reasonable forecasting." Therefore, we conclude that the environmental impacts of upstream natural gas production are not an indirect effect of the project. Last, where there is not even an identified general supply area for the gas that will be transported on the project, any analysis of production impacts would be so generalized it would be meaningless. 185

b. <u>Indirect Impacts of Downstream Natural Gas</u> <u>Consumption</u>

124. The Conservation Intervenors assert that Commission staff "cannot use uncertainty regarding the ultimate destination of the gas as an excuse to treat downstream emissions as if they do not exist." In addition, the Conservation Intervenors argue that although the 275,000 Dth/d of incremental firm service capability is not currently slated for delivery to specific end users, this does not mean downstream GHG emissions are not an indirect impact. Instead, the Conservation Intervenors assert that the Commission would be a "legally relevant cause" of the emissions and that the EA should have included an estimate of downstream GHG emissions.

¹⁸³ See, e.g., Central New York Oil and Gas Co., LLC, 137 FERC ¶ 61,121, at PP 81-101 (2011), order on reh'g, 138 FERC ¶ 61,104, at PP 33-49 (2012), petition for review dismissed sub nom. Coalition for Responsible Growth v. FERC, 485 F. App'x. 474-75 (2d Cir. 2012) (unpublished opinion).

¹⁸⁴ Birckhead v. FERC, 925 F.3d 510, 517 (D.C. Cir. 2019) (holding the Commission did not violate NEPA in not considering upstream impacts where there was no evidence to predict the number and location of additional wells that would be drilled as a result of a project).

¹⁸⁵ See Sierra Club v. DOE, 867 F.3d 189, 200 (D.C. Cir. 2017) (accepting DOE's "reasoned explanation" as to why the indirect effects pertaining to induced natural gas production were not reasonably foreseeable where DOE noted the difficulty of predicting both the incremental quantity of natural gas that might be produced and where at the local level such production might occur, and that an economic model estimating localized impacts would be far too speculative to be useful).

¹⁸⁶ Conservation Intervenors' Comments at 6.

- 125. The D.C. Circuit Court of Appeals in *Sierra Club v. FERC* held that where it is known that the natural gas transported by a project will be used for a specific end-use combustion, the Commission should "estimate[] the amount of power-plant carbon emissions that the pipelines will make possible." However, outside the context of known specific end use, the D.C. Circuit affirmed in *Birckhead v. FERC*, the fact that "emissions from downstream gas combustion are [not], as a categorical matter, always a reasonably foreseeable indirect effect of a pipeline project." 188
- 126. In this case, not all of the combustion is reasonably foreseeable. As mentioned above, the project will enable Columbia to increase firm natural gas transportation capacity on its system by 275,000 Dth/d for delivery to Ohio and West Virginia, and Columbia's 5-year precedent agreement with Range is for 50,000 Dth/d of firm service using the expansion capacity. Because the end-use of this volume of gas as well as the uncontracted for volumes is unknown, any potential GHG emissions associated with the ultimate combustion of the transported gas are not reasonably foreseeable, and therefore not an indirect impact of the Buckeye XPress Project.

22. Climate Change Impacts of Greenhouse Gas Emissions

127. The EPA recommends that Columbia adopt measures to reduce and sequester greenhouse gas emissions, such as addressing leaks, replanting trees, restoring vegetation, and complying with the provisions of EPA's Natural Gas STAR Program. As stated in

¹⁸⁷ Sierra Club v. FERC, 867 F.3d 1357, 1371 (D.C. Cir. 2017) (Sierra Club).

¹⁸⁸ Birckhead v. FERC, 925 F.3d at 519 (citing Calvert Cliffs' Coordinating Committee, Inc. v. U.S. Atomic Energy Commission, 449 F.2d 1109, 1122 (D.C. Cir. 1971)). The court in Birckhead also noted that "NEPA . . . requires the Commission to at least attempt to obtain the information necessary to fulfill its statutory responsibilities," but citing to Delaware Riverkeeper Network, the court acknowledged that NEPA does not "demand forecasting that is not meaningfully possible." Id. at 520 (quoting Delaware Riverkeeper Network v. FERC, 753 F.3d 1304, 1310 (D.C. Cir. 2014)).

¹⁸⁹ EPA's Natural Gas STAR Program "provides a framework for [p]artner companies with U.S. oil and gas operations to implement methane reducing technologies and practices and document their voluntary emission reduction activities. By joining the [p]rogram, [p]artner companies commit to evaluate and implement cost-effective methane emission reduction opportunities and communicate and share that information across their corporation and with the Natural Gas STAR Program." U.S. Environmental Protection Agency, *Natural Gas STAR Program*, https://www.epa.gov/natural-gas-star-program/natural-gas-star-program (last visited Jan. 8, 2020).

EA section B.8, ¹⁹⁰ Columbia is not a participant in the Natural Gas STAR Program, but Columbia states it would reduce methane leakage from the project through implementation of industry best management practices. Additionally, we anticipate the replacement of the existing pipeline would result in a net reduction in leakage emissions as a result of the installation of newer, more efficient equipment. Revegetation is described in Columbia's *Construction Standards* and the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* at section V.D. Generally, except in site-specific circumstances, tree planting is not required for Commission pipeline projects, especially in areas with adequate rainfall to actively promote natural growth and recruitment of saplings.

- 128. The EPA also recommends assessing pipeline depth and potential exposure and recommends installation of erosion control devices compared to changes in intensity and frequency of climate-induced changes in precipitation events. Flooding hazards, including increased pipeline depth at waterbodies, are discussed in section B.1. Erosion control devices would be installed as indicated in the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and *Wetland and Waterbody Construction and Mitigation Procedures*, Columbia's *Construction Standards*, and statemandated stormwater permit requirements.
- 129. Though the EA recognizes that "there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to the [Buckeye XPress Project's] incremental contribution to GHGs[,]" the Conservation Intervenors disagree, and highlight that the EPA, National Aeronautics and Space Administration, and Intergovernmental Panel on Climate Change have models. Moreover, the Conservation Intervenors argue that Commission staff misunderstands the climate crisis by believing it can only make conclusions on the Buckeye XPress Project's climate impact if it can determine the precise physical impacts caused by the project's GHG emissions. Furthermore, the Conservation Intervenors contend that the EA should have estimated the GHG emissions from burning of the delivered gas.
- 130. The EA discusses the direct greenhouse gas impacts from construction and operation of the project, climate change impacts generally in the region, and the

 $^{^{190}}$ EA at B-177 – B-178.

¹⁹¹ EA at B-17 – B-19.

¹⁹² EA at B-235.

regulatory structure for greenhouse gases under the Clean Air Act. ¹⁹³ The EA states that during construction and operation of the project, these GHGs would be emitted from the majority of construction and operational equipment, as well as from fugitive methane leaks from the pipeline and aboveground facilities. The EA estimates that construction of the Buckeye XPress Project may result in emissions of up to 109,575 tons of GHG emissions over the duration of construction. ¹⁹⁴ The EA estimates that the clearance of 732 acres of forest for the project right-of-way is estimated to result in a one-time release of about 96,112 metric tons of CO2, plus an additional loss of about 461 metric tons per year of CO2 sequestration capacity. Additionally, the EA estimates that operation of the Buckeye Xpress Project will result in direct emissions of up to 204.0 tons per year of GHG, primarily fugitive emissions from incidental leaks or releases. ¹⁹⁵

131. The EA acknowledges that the quantified greenhouse gas emissions from the construction and operation of the project will contribute incrementally to climate change. The EA also states, "there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to the [project's] incremental contribution to GHGs." The Commission has affirmed that it could not determine a project's incremental physical impacts on the environment caused by greenhouse gas emissions. The EA examined atmospheric modeling used by the EPA, National Aeronautics and Space Administration, the Intergovernmental Panel on Climate Change, and others and found that those models are not reasonable for project-level analysis for a number of reasons, including inability to determine the incremental impact of individual projects, due to both scale and overwhelming complexity. The EA examined are not reasonable for project-level analysis for a number of reasons, including inability to determine the incremental impact of individual projects, due to both scale and overwhelming complexity.

¹⁹³ EA at B-232 – B-235. We explain that GHG emissions related to the consumption of natural gas are not indirect effects of the project. *See supra* paras. 125-127.

¹⁹⁴ EA at B-177.

¹⁹⁵ EA at B-178.

¹⁹⁶ *Id.* at B-235.

¹⁹⁷ *Id*.

¹⁹⁸ Dominion Transmission, Inc., 163 FERC ¶ 61,128, at PP 67-70 (2018) (LaFleur, Comm'r, dissenting in part; Glick, Comm'r, dissenting in part).

¹⁹⁹ *Id*.

132. The EA states that "[w]ithout either the ability to determine discrete resource impacts or an established target to compare GHG emissions against, we are unable to determine the significance of the Project's contribution to climate change."²⁰⁰ The Commission has also previously concluded it could not determine whether a project's contribution to climate change would be significant.²⁰¹

a. Social Costs of Carbon

133. The Conservation Intervenors argue that Commission staff does not offer a rational explanation for refusing to use the Social Costs of Carbon tool. The Social Cost of Carbon estimates the monetized climate change damage associated with an incremental increase in CO₂ emissions in a given year. The Commission has provided extensive discussion on why the Social Cost of Carbon is not appropriate in project-level NEPA review and cannot meaningfully inform the Commission's decisions on natural gas infrastructure projects under the NGA.²⁰² We adopt that reasoning here.

b. Climate Change and Project Alternatives

134. The Conservation Intervenors argue that Commission staff should have compared the Buckeye XPress Project's GHG emissions and climate impacts to the emissions and impacts of the project alternatives. Commission staff thoroughly evaluated alternatives in the EA,²⁰³ and other parts of this order address challenges to that analysis. In each of these analyses, staff considered comparative environmental information to discern whether a potential alternative could provide a significant environmental advantage over the proposed action. The environmental information considered impacts on all potentially affected resources.

²⁰⁰ EA at B-178.

²⁰¹ Dominion Transmission, Inc., 163 FERC ¶ 61,128, at PP 67-70 (2018) (LaFleur, Comm'r, dissenting in part; Glick, Comm'r, dissenting in part).

²⁰² Mountain Valley Pipeline, LLC, 161 FERC ¶ 61,043, at P 296 (2017), order on reh'g, 163 FERC ¶ 61,197, at PP 275-297 (2018), aff'd, Appalachian Voices v. FERC, No. 17-1271, 2019 WL 847199, at *2 (D.C. Cir. Feb. 19, 2019) ("[the Commission] gave several reasons why it believed petitioners' preferred metric, the Social Cost of Carbon tool, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.").

 $^{^{203}}$ EA at C-1 – C-42.

23. Cumulative Impacts

- 135. Several commenters generally noted that the Buckeye XPress Project is "one part of several projects contributing to massive infrastructure expansion for oil and gas," and argues that another pipeline in Ohio would be environmentally harmful. The Conservation Intervenors also allege that the EA failed to analyze the cumulative impacts on bat species and bird species due to habitat loss from forest clearing, and specifically in connection with the Sunny Oaks Project and other tree- and vegetation-clearing projects. ²⁰⁶
- 136. CEQ regulations define cumulative impact as "the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." The D.C. Circuit has held that a meaningful cumulative impact analysis must identify: (1) the area in which the effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions—past, present, and proposed, and reasonably foreseeable—that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate. The geographic scope of our cumulative impact analysis varies from case to case, and resource to resource, depending on the facts presented.
- 137. Section B.10 of the EA addresses cumulative impacts. Staff identified eight types of projects that could cause a cumulative impact when considered with the Buckeye XPress Project, including the Sunny Oaks Project and other silviculture projects.²⁰⁹ With

²⁰⁴ Lyndsay Tarus's June 14, 2019 and Miles Pillar's June 18, 2019 Comments.

²⁰⁵ The Sunny Oaks Project is a Forest Service proposal and may involve timber harvests, timber stand improvements (including prescribed burns), and construction activities (including new roads and modifications of existing roads) on about 25,000 acres of the Wayne National Forest. EA at B-215.

²⁰⁶ Conservation Intervenor's June 19, 2019 Comments at 19, 24.

²⁰⁷ 40 C.F.R. § 1508.7 (2019).

²⁰⁸ Freeport LNG, 827 F. 3d at 39 (quoting TOMAC, Taxpayers of Mich. Against Casinos v. Norton, 433 F. 3d 852, 864 (D.C. Cir. 2006) and Grand Canyon Trust v. FAA, 290 F. 3d 339, 345 (D.C. Cir. 2002)).

 $^{^{209}}$ EA at B-215 – B-216.

regard to impacts on wildlife habitat, the EA acknowledged that the Buckeye XPress Project in combination with other identified projects, would result in the disturbance of thousands of acres of wildlife habitat. However, the EA concluded that "[g]iven the large amount of wildlife habitat that would remain undisturbed within the geographic scope, the measures that Columbia would use to minimize impacts, (such as the active revegetation of impacted areas), and specialized measures for migratory birds," the Buckeye XPress Project would not have a significant cumulative impact on wildlife. Therefore, because Commission staff considered the cumulative impacts of the Buckeye XPress Project with other projects, including oil and gas projects, or actions within the geographic and temporal scope of the project, we agree that the project would not significantly impact resources within cumulative impact geographic areas.

24. <u>Conclusion</u>

- 138. Based on the analysis in the EA, as supplemented herein, we conclude that if constructed, replaced, operated, and abandoned in accordance with Columbia's application and supplements, and in compliance with the environmental conditions in the appendix to this order, our approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.
- 139. Compliance with the environmental conditions appended to our orders is integral to ensuring that the environmental impacts of approved projects are consistent with those anticipated by our environmental analyses. Thus, Commission staff carefully reviews all information submitted. Only when satisfied that the applicant has complied with all applicable conditions will a notice to proceed with the activity to which the conditions are relevant be issued. We also note that the Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources during construction, operation, and abandonment of the project, including authority to impose any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order, as well as the avoidance or mitigation of unforeseen adverse environmental impacts resulting from project construction, operation, and abandonment.
- 140. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or

²¹⁰ EA at B-225.

²¹¹ EA at B-226.

local laws, may prohibit or unreasonably delay the construction, replacement, or operation of facilities approved by this Commission.²¹²

141. At a hearing held on January 23, 2020, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, and exhibits thereto, and all comments and upon consideration of the record,

The Commission orders:

- (A) A certificate of public convenience and necessity is issued to Columbia authorizing it to abandon, construct, and operate the proposed Buckeye XPress Project, 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:
 - (1) Columbia's proposed project being constructed and made available for service within two years of the date of this order pursuant to section 157.20(b) of the Commission's regulations;
 - (2) Columbia's compliance with all applicable Commission regulations, particularly the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;
 - (3) Columbia's compliance with the environmental conditions listed in the appendix to this order; and
 - (4) Filing written statements affirming that is has executed firm service agreements for volumes and service terms equivalent to those in its precedent agreement, prior to commencing construction.

²¹² See 15 U.S.C. § 717r(d) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); see also Schneidewind v. ANR Pipeline Co., 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and Dominion Transmission, Inc. v. Summers, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

- (C) Columbia is granted permission and approval to abandon the facilities described in this order, and as more fully described in the application.
- (D) Columbia shall notify the Commission within 10 days of the abandonment of the facilities.
- (E) Columbia's proposed incremental recourse reservation charge and usage charge for transportation on the Buckeye XPress Project is approved, as conditioned and more fully discussed above.
- (F) Columbia's proposal to charge its generally applicable system surcharges to recover fuel costs associated with the Buckeye XPress Project is approved.
- (G) Columbia's proposal to charge its generally applicable TCRA and OTRA surcharges is approved.
- (H) Columbia shall keep separate books and accounting of costs attributable to the proposed incremental services, as more fully described above.
- (I) Columbia shall file actual tariff records setting forth the initial rates for service 60 days prior to the date the proposed facilities go into service.
 - (J) The Conservation Intervenors' request for a formal hearing is denied.
- (K) Columbia shall notify the Commission's environmental staff by telephone or e-mail of any environmental non-compliance identified by other federal, state, or local agencies on the same day that such agency notifies Columbia. Columbia shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

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

Commissioner McNamee is concurring with a separate statement attached.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

Appendix

Environmental Conditions

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

- 1. Columbia Gas Transmission, LLC (Columbia) shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the environmental assessment (EA), unless modified by the Order. Columbia **must**:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification**.
- 2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the Project and activities associated with abandonment. This authority shall allow:
 - a. the modification of conditions of the Order;
 - b. stop-work authority; and
 - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from Project construction, operation, and abandonment activities.
- 3. **Prior to any construction**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel will be informed of the 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 before the start**

of construction, Columbia shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

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

5. Columbia shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP before construction in or near that area.

This requirement does not apply to extra workspace allowed by the FERC *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements, which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by state regulatory authorities; and
- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
- 6. Within 60 days of the acceptance of the Certificate and before construction or abandonment by removal begins, Columbia shall file an Implementation Plan

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

- a. how Columbia will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
- b. how Columbia will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- c. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
- e. the location and dates of the environmental compliance training and instructions 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 portion of Columbia's organization having responsibility for compliance;
- g. the procedures (including use of contract penalties) Columbia will follow if noncompliance occurs; and
- h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
- 7. Columbia shall employ at least one EI per construction spread. The EI(s) shall be:
 - a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;

- c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
- d. a full-time position, separate from all other activity inspectors;
- e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
- f. responsible for maintaining status reports.
- 8. Beginning with the filing of its Implementation Plan, Columbia shall file updated status reports with the Secretary on a **weekly** basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
 - a. an update on Columbia's efforts to obtain the necessary federal authorizations;
 - b. the construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective actions implemented in response to all instances of noncompliance;
 - e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by Columbia from other federal, state, or local permitting agencies concerning instances of noncompliance, and Columbia's response.
- 9. Columbia must receive written authorization from the Director of OEP **before commencing construction of any Project facilities or abandonment by removal.** To obtain such authorization, Columbia must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

- 10. Columbia must receive written authorization from the Director of OEP **before placing the Project into service**. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily
- 11. **Within 30 days of placing the authorized facilities in service**, Columbia shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed/abandoned/installed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the conditions in the Order Columbia has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
- 12. **Prior to any abandonment by removal activities**, Columbia shall file the following information with the Secretary for review and written approval by the Director of OEP:
 - a. identification of any equipment or facilities to be abandoned or disturbed that may be contaminated with polychlorinated biphenyls (PCBs) or asbestos-containing materials (ACMs);
 - b. verification that the appropriate PCB/ACM testing will be conducted on this equipment/facility, and discussion of how any abandoned PCB/ACM-contaminated material will be properly disposed of; and
 - c. worker safety protocols for handling PCB/ACM-contaminated materials
- 13. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of the OEP, an *Abandoned Mine Investigation and Mitigation Plan*. This plan shall include the final results of Columbia's geohazard investigations pertinent to mine hazards, the results of secondary investigations to further characterize potential mine-related features (addressing the recommendations of Columbia's geotechnical contractor), and site-specific mitigation and monitoring measures Columbia will implement when crossing abandoned mine lands, including measures to manage and dispose of contaminated groundwater.
- 14. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of the OEP, an *Acid Mine Drainage Mitigation Plan*.

- 15. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of the OEP, its final geohazard report. The geohazard report shall include the results of Columbia's site-specific identification of the slopes that will require blasting, quantification of the potential for blasting-induced slope instability or movement for each slope, developed measures to mitigate and monitor the sites post-construction, and include descriptions of and distances to nearby and downslope environmental and human receptors from potential blast-induced landslides or debris flows.
- 16. **Prior to construction of the Highway 32 and Wetland 545B horizontal directional drills (HDD)**, Columbia shall file with the Secretary for review and written approval by the Director of OEP, settlement monitoring, minimization, and mitigation plans developed in coordination with the owners of overlying infrastructure.
- 17. **Prior to construction of the Wetland 558B and Wetland 545B HDDs**, Columbia shall complete and file with the Secretary additional geotechnical and/or geophysical investigations along the proposed HDD alignment to better define the topography of the bedrock surface. If the results of these investigations lead to changes in the drill path or HDD entry/exit locations, Columbia shall file with the Secretary, for review and written approval by the Director of OEP, the modifications to the Wetland 558B and Wetland 545B HDDs.
- 18. **Prior to construction**, Columbia shall file with the Secretary, for review and written approval by the Director of OEP, a plan developed in coordination with the U.S. Forest Service (Forest Service), designed to avoid, minimize, and/or mitigate impacts on occupied timber rattlesnake habitat within the Wayne National Forest.
- 19. Columbia shall **not begin** construction of the proposed Project at designated Project-specific locations **until**:
 - a. Columbia completes the Kirtland's snake (at CY-001-B, CY-004-B, Milepost 38.7, and Milepost 43.2) and eastern spadefoot (at CY-004-B) biological surveys and reports;
 - b. Columbia has finalized its plan, developed in consultation with the Ohio Department of Natural Resources, Wayne National Forest, and Forest Service (where applicable), regarding its planned approach for protecting state-listed species; and
 - c. Columbia has received written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.
- 20. **Prior to construction**, Columbia shall file with the Secretary evidence of landowner concurrence with the site-specific residential construction plans for

- parcels OH-JA-090.320 and OH-LA-131.000 where construction work areas will be within 10 feet of a residence.
- 21. **Prior to construction**, Columbia shall file the *Heavy Haul Route Study* with the Secretary for review and written approval by the Director of OEP.
- 22. **As part of the Implementation Plan**, Columbia shall file with the Secretary a revised *Unanticipated Discovery Plan* that includes notification of the proper Wayne National Forest staff in the event of unanticipated finds on Wayne National Forest lands.
- 23. Columbia shall **not begin construction** of facilities and/or use of staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
 - a. Columbia files with the Secretary:
 - i. remaining cultural resources survey reports;
 - ii. site evaluation reports, avoidance plans, or treatment plans, as required; and
 - iii. comments on the reports and plans from the Ohio SHPO and Forest Service, as applicable.
 - b. the Advisory Council on Historic Preservation has been given an opportunity to comment if historic properties would be adversely affected; and
 - c. the FERC staff reviews and the Director of OEP approves all cultural resources reports and plans and notifies Columbia in writing that either treatment measures (including archaeological data recovery) may be implemented or construction may proceed.
 - All materials filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CUI//PRIV DO NOT RELEASE."
- 24. Columbia shall use mobile blowdown silencers at the McArthur Regulator Station, Symmes Valve Station and the Neds Fork Valve Station during the proposed abandonment activities to reduce day-night noise levels to less than 70 decibels on the A-weighted scale.
- 25. **Prior to construction within the Wayne National Forest,** Columbia shall file with the Secretary a plan for review and approval by the Director of OEP, developed in coordination with and approved by the Forest Service, designed to avoid or minimize impacts on sensitive habitats in the Bluegrass Ridge Special Area to the extent feasible.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Columbia Gas Transmission, LLC

Docket No. CP18-137-000

(Issued January 23, 2020)

GLICK, Commissioner, dissenting in part:

- 1. I dissent in part from today's order because it violates both the Natural Gas Act¹ (NGA) and the National Environmental Policy Act² (NEPA). The Commission once again refuses to consider the consequences its actions have for climate change. Although neither the NGA nor NEPA permit the Commission to assume away the climate change implications of constructing and operating this project, that is precisely what the Commission is doing here.
- 2. In today's order authorizing Columbia Gas Transmission, LLC's (Columbia) proposed Buckeye XPress Project (Project), the Commission continues to treat greenhouse gas (GHG) emissions and climate change differently than all other environmental impacts.³ The Commission again refuses to consider whether the Project's contribution to climate change from GHG emissions would be significant, even though it quantifies the direct GHG emissions from the Project's construction and operation.⁴ That failure forms an integral part of the Commission's decisionmaking: The refusal to assess the significance of the Project's contribution to the harm caused by climate change is what allows the Commission to state that approval of the Project "would not constitute a major federal action significantly affecting the quality of the human environment" and, as a result, conclude that the Project is in the public interest

¹ 15 U.S.C. § 717f (2018).

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

³ Columbia Gas Transmission, LLC, 170 FERC ¶ 61,045 (2020) (Certificate Order); Buckeye XPress Project Environmental Assessment (EA) at B-235.

⁴ As discussed further below, *see infra* PP 10-12, the Commission quantified some of the Project's direct and indirect GHG emissions from construction and operation but not the downstream emissions resulting from the Project's incremental expansion capacity, including capacity subscribed by the Project's only expansion shipper, Range Resources-Appalachia (Range Resources).

⁵ Certificate Order, 170 FERC ¶ 61,045 at P 48; EA at D-1.

and required by the public convenience and necessity. Claiming that a project has no significant environmental impacts while at the same time refusing to assess the significance of the project's impact on the most important environmental issue of our time is not reasoned decisionmaking.

3. Making matters worse, the Commission again refuses to make a serious effort to assess the indirect effects of the Project. The United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) has repeatedly criticized the Commission for its stubborn refusal to identify and consider the reasonably foreseeable GHG emissions caused by the downstream combustion of natural gas transported through an interstate pipeline. But even so, today's order doubles down on approaches that the D.C. Circuit has already rejected. So long as the Commission refuses to heed the court's unambiguous directives, I have no choice but to dissent.

I. The Commission's Public Interest Determination Is Not the Product of Reasoned Decisionmaking

4. We know with certainty what causes climate change: It is the result of GHG emissions, including carbon dioxide and methane, released in large quantities through the production, transportation, and the consumption of fossil fuels, including natural gas. The Commission recognizes this relationship, finding, as it must, that climate change is "driven by accumulation of GHGs in the atmosphere through combustion of fossil fuels" and that emissions from the Project's construction and operation, in combination with emissions from other sources, would "contribute incrementally to future climate change impacts." In light of this undisputed relationship between anthropogenic GHG emissions and climate change, the Commission must carefully consider the Project's contribution to climate change, both in order to fulfill NEPA's requirements and to determine whether the Project is in the public interest and required by the public convenience and necessity.⁸

⁶ *Id.* at P 27.

⁷ EA at B-233–B-235.

⁸ Section 7 of the NGA requires that, before issuing a certificate for new pipeline construction, the Commission must find both a need for the pipeline and that, on balance, the pipeline's benefits outweigh its harms. 15 U.S.C. § 717f. Furthermore, NEPA requires the Commission to take a "hard look" at the environmental impacts of its decisions. See 42 U.S.C. § 4332(2)(C)(iii); Balt. Gas & Elec. Co. v. Nat. Res. Def. Council, Inc., 462 U.S. 87, 97 (1983). This means that the Commission must consider and discuss the significance of the harm from a pipeline's contribution to climate change by actually evaluating the magnitude of the pipeline's environmental impact. Doing so

5. Today's order falls short of that standard. As part of its public interest determination, the Commission must examine the Project's impact on the environment and public safety, which includes the facility's impact on climate change. That is now clearly established D.C. Circuit precedent. The Commission, however, insists that it need not consider whether the Project's contribution to climate change is significant because there is "no universally accepted methodology" for considering the Project's impact. However, the most troubling part of the Commission's rationale is what comes next. Based on this alleged inability to assess significance, the Commission concludes that the Project will have no significant environmental impact. Think about that. The Commission is saying out of one side of its mouth that it need not assess the significance of the Project's impact on climate change while, out of the other side of its mouth, assuring us that all environmental impacts are insignificant. That is ludicrous,

enables the Commission to compare the environment before and after the proposed federal action and factor the changes into its decisionmaking process. *See Sierra Club v. FERC*, 867 F.3d 1357, 1374 (D.C. Cir. 2017) (*Sabal Trail*) ("The [FEIS] needed to include a discussion of the 'significance' of this indirect effect."); 40 C.F.R. § 1502.16 (a)–(b) (An agency's environmental review must "include the environmental impacts of the alternatives including the proposed action," as well as a discussion of direct and indirect effects *and their significance*. (emphasis added)).

⁹ See Sabal Trail, 867 F.3d at 1373 (explaining that the Commission must consider a pipeline's direct and indirect GHG emissions because the Commission may "deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment"); see also Atl. Ref. Co. v. Pub. Serv. Comm'n of N.Y., 360 U.S. 378, 391 (1959) (holding that the NGA requires the Commission to consider "all factors bearing on the public interest").

¹⁰ See Allegheny Def. Project v. FERC, 932 F.3d 940, 945-46 (D.C. Cir. 2019); Birckhead v. FERC, 925 F.3d 510, 518-19 (D.C. Cir. 2019); Sabal Trail, 867 F.3d at 1371-72. The history of these cases is discussed further below. See infra P 9.

¹¹ See EA at B-235 ("Currently, there is no universally accepted methodology to attribute discrete, quantifiable, physical effects on the environment to the [Project's] incremental contribution to GHGs.").

¹² See Certificate Order, 170 FERC ¶ 61,045 at P 138 (Approval of the Project "would not constitute a major federal action significantly affecting the quality of the human environment."); EA at D-1.

unreasoned, and an abdication of our responsibility to give climate change the "hard look" that the law demands. ¹³

- 6. It also means that the volume of emissions caused by the Project does not play a meaningful role in the Commission's public interest determination, no matter how many times the Commission assures us otherwise. Using the approach in today's order, the Commission will always be able to conclude that a project will not have any significant environmental impact irrespective of the project's actual GHG emissions or those emissions' impact on climate change. So long as that is the case, a project's impact on climate change cannot, as a logical matter, play a meaningful role in the Commission's public interest determination. A public interest determination that systematically excludes the most important environmental consideration of our time is contrary to law, arbitrary and capricious, and not the product of reasoned decisionmaking.
- 7. Commissioner McNamee argues that the D.C. Circuit cases cited above ¹⁴ were wrongly decided. ¹⁵ Although that is his prerogative, it is irrelevant to the task before us. As he has explained, we are called on to apply the law and the facts, not our personal policy preferences. But surely, implicit in that statement, is a recognition that we must apply the law as it is, not as we wish it were. The D.C. Circuit has unambiguously interpreted the "public convenience and necessity" standard in section 7 of the NGA to encompass the authority to consider and, if appropriate, act upon "the direct and indirect environmental effects" of a proposed pipeline. ¹⁶ As Commissioners, our job is to apply

¹³E.g., Myersville Citizens for a Rural Cmty., Inc. v. FERC, 783 F.3d 1301, 1322 (D.C. Cir. 2015) (agencies cannot overlook a single environmental consequence if it is even "arguably significant"); see Michigan v. EPA, 135 S. Ct. 2699, 2706 (2015) ("Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational." (internal quotation marks omitted)); see also Motor Vehicle Mfrs. Ass'n, Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (explaining that agency action is "arbitrary and capricious if the agency has . . . entirely failed to consider an important aspect of the problem, [or] offered an explanation for its decision that runs counter to the evidence before the agency.").

¹⁴ Supra note 10.

 $^{^{15}}$ Certificate Order, 170 FERC \P 61,045 (McNamee, Comm'r, concurring at P 12 & n.29).

¹⁶ E.g., Sabal Trail, 867 F.3d at 1373.

that law, not to attack binding judicial precedent in favor of an interpretation that was, in fact, expressly rejected by the court.¹⁷

II. The Commission's NEPA Analysis of the Project's Contribution to Climate Change Is Deficient

- 8. The Commission's NEPA analysis is similarly flawed. When conducting a NEPA review, an agency must consider both the direct and the indirect effects of the project under consideration. As noted, the D.C. Circuit has repeatedly instructed the Commission that the GHG emissions caused by the reasonably foreseeable combustion of natural gas transported through a pipeline is an indirect effect and must, therefore, be included within the Commission's NEPA analysis. It is past time for the Commission to learn that lesson.
- 9. Beginning with Sabal Trail, the D.C. Circuit has held unambiguously that the Commission must identify and consider reasonably foreseeable downstream GHG emissions as part of its NEPA analysis.²⁰ Shortly after that decision, the Commission attempted to cabin Sabal Trail to its facts, taking the position that it was required to consider downstream GHG emissions only under the exact facts presented in Sabal Trail—i.e., where the pipeline was transporting natural gas for combustion at a particular natural gas power plant (or plants).²¹ In Birckhead, the D.C. Circuit rejected that argument, admonishing the Commission that it must examine the specific record before it and that it may not categorically ignore a pipeline's downstream emissions just because it

¹⁷ *Id.*; *see Birckhead*, 925 F.3d at 519 (explaining that in "the pipeline certification context the Commission does have statutory authority to act" on the reasonably foreseeable GHG emissions caused by the pipeline (citing *Sabal Trail*, 867 F.3d at 1373)).

¹⁸ 40 C.F.R. §§ 1502.16(b), 1508.8(b); Sabal Trail, 867 F.3d at 1371.

¹⁹ See Allegheny Def. Project, 932 F.3d at 945-46; Birckhead, 925 F.3d at 518-19; Sabal Trail, 867 F.3d at 1371-72.

²⁰ Sabal Trail, 867 F.3d at 1371-72; see also id. at 1371 ("Effects are reasonably foreseeable if they are 'sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision." (quoting *EarthReports, Inc. v. FERC*, 828 F.3d 949, 955 (D.C. Cir. 2016))).

²¹ Birckhead, 925 F.3d at 518-19 (rejecting the "Commission['s] conten[tion] [that Sabal Trail] . . . is narrowly limited to the facts of that case" (internal quotation marks omitted)).

does not fit neatly within the facts of *Sabal Trail*. Indeed, the Court expressly rejected the Commission's argument "that downstream emissions are an indirect effect of a project only when the project's 'entire purpose' is to transport gas to be burned at 'specifically-identified' destinations"—i.e., the facts of *Sabal Trail*. Since *Birckhead*, the court has continued to turn aside the Commission's efforts to ignore reasonably foreseeable downstream GHG emissions.²³

10. And yet, with today's order, the Commission continues to thumb its nose at the court by stubbornly clinging to its interpretation of *Sabal Trail* that *Birckhead* rejected. Although the EA estimated some of the Project's direct and indirect GHG emissions from construction and operation,²⁴ there is no comparable estimate of the downstream GHG emissions associated with the Project's expansion capacity—at least the portion of that new capacity with a subscribed shipper.²⁵ The Commission does not provide any reason to ignore those emissions. As an initial matter, we know that the vast majority, 97 percent, of all natural gas consumed in the United States is combusted²⁶—a fact that, on its own, might be sufficient to make downstream emissions reasonably foreseeable, at least absent contrary evidence. Moreover, the record here makes this a relatively easy case: The stated purpose for the expansion capacity is "to transport increasing natural gas

²² *Id.* at 519 (citing the Commission's brief in that case).

²³ See Allegheny Def. Project, 932 F.3d at 945-46 (holding that the petitioners are "correct that NEPA required the Commission to consider both the direct and indirect environmental effects of the Project, and that, despite what the Commission argues, the downstream greenhouse-gas emissions are just such an indirect effect").

²⁴ EA at B-174–B-178, Tables B.8-1 & B.8-2 (estimating approximately 78,500 metric tons of GHG emissions per year from construction and operation); *id.* B-235 (estimating a one-time release of approximately 96,112 metric tons of GHG emissions due to forest clearing, plus an additional loss of about 461 metric tons per year of sequestration capacity).

²⁵ A substantial portion of the Project's expansion capacity, which the Commission deems "incidental" to the need for the Project, remains unsubscribed; however, one shipper, Range Resources, has subscribed to 50,000 Dth/day of firm transportation service. Certificate Order, 170 FERC ¶ 61,045 at P 25.

²⁶ U.S. Energy Info. Admin., *September 2019 Monthly Energy Review* 22, 97 (2019) (reporting that, in 2018, 778 Bcf of natural gas had a non-combustion use compared to 29,956 Bcf of total consumption), https://www.eia.gov/totalenergy/data/monthly/archive/00351908.pdf.

supply from Ohio and the Marcellus and Utica Shales region to markets, particularly in Appalachia, and to support regional power generation." Using that information, the Commission could have easily engaged in a little "reasonable forecasting" aided by "educated assumptions"—which is precisely what NEPA requires—in order to develop an estimate or a range of estimates of the likely emissions caused by the Project. ²⁸

11. Nevertheless, in today's order, the Commission neither attempts to assess the downstream GHG impacts of the Project nor asks the applicant to provide any details about end use, which it consistently claims is necessary to consider downstream GHG emissions. In so doing, it is again "excus[ing] itself from making any effort to develop the record in the first place." That is exactly the result it was so roundly criticized for in *Birckhead—i.e.*, that the Commission will ignore downstream GHG emissions "outside the context of known specific end use." Today's holding means that, almost by definition, the Commission will never consider the GHG emissions resulting from a shipper's capacity subscription, even when the record indicates that the gas will be used for electricity generation, as it does here. It is hard to imagine what would cause the Commission to try so hard to ignore those emissions other than its lingering inability to take the *Sabal Trail* line of cases seriously and its apparent belief that those decisions can still essentially be cabined to its facts. The commission neither applicant to provide any details.

²⁷ EA at A-6.

²⁸ Sabal Trail, 867 F.3d at 1374 (quoting Del. Riverkeeper Network v. FERC, 753 F.3d 1304, 1310 (D.C. Cir. 2014)); see id. ("We understand that emission estimates would be largely influenced by assumptions rather than direct parameters about the project, but some educated assumptions are inevitable in the NEPA process. And the effects of assumptions on estimates can be checked by disclosing those assumptions so that readers can take the resulting estimates with the appropriate amount of salt." (internal citations and quotation marks omitted)).

²⁹ Birckhead, 925 F.3d at 520 (quoting Tennessee Gas Pipeline, 163 FERC 61,190 (2018) (Glick, Comm'r, dissenting at 2)).

³⁰ Certificate Order, 170 FERC ¶ 61,045 at P 125.

³¹ Cf. id. P 126 (declining to perform a downstream emissions calculation for the quantities of natural gas that would be transported by the Project because "the end-use . . is unknown"). But see Birckhead, 925 F.3d at 518-19 (rejecting the "Commission['s] conten[tion] [that Sabal Trail] . . . is narrowly limited to the facts of that case" (internal quotation marks omitted)).

- 12. The Commission also gives no consideration to whether the Project will lead to an increase in upstream GHG emissions from additional production. The Commission cannot ignore the fact that adding firm transportation capacity is likely to "spur demand" for natural gas, particularly where, as here, the stated purpose of the expansion capacity is to transport increasing supplies of natural gas produced in the Ohio and the Marcellus and Utica Shales region to market.³² Until the Commission starts taking its responsibilities under NEPA seriously, I will have no choice but to continue to dissent from determinations that ignore reasonably foreseeable GHG emissions.
- 13. In addition, even where the Commission quantifies the Project's GHG emissions, it fails to "evaluate the 'incremental impact' that [those emissions] will have on climate change or the environment more generally." In Sabal Trail, the court explained that the Commission was required "to include a discussion of the 'significance' of" the indirect effects of the Project, including its GHG emissions. That makes sense. Identifying and evaluating the consequences that the Project's GHG emissions may have for climate change is essential if NEPA is to play the disclosure and good government roles for which it was designed. But neither today's order nor the accompanying EA provide that discussion or even attempt to assess the significance of the Project's GHG emissions.
- 14. Instead, the Commission insists that it need not assess the significance of the Project's GHG emissions because it lacks a "universally accepted methodology to

³² See supra note 27. Moreover, the Project cannot possibly achieve the benefits that Columbia advances—improved reliability and access to economic supplies of natural gas—unless consumers actually use the natural gas the Project will transport. EA at A-5—A-6.

³³ Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin., 538 F.3d 1172, 1216 (9th Cir. 2008); see also WildEarth Guardians v. Zinke, No. CV 16-1724 (RC), 2019 WL 1273181, at *1 (D.D.C. Mar. 19, 2019) (explaining that the agency was required to "provide the information necessary for the public and agency decisionmakers to understand the degree to which [its] decisions at issue would contribute" to the "impacts of climate change in the state, the region, and across the country").

³⁴ Sabal Trail, 867 F.3d at 1374.

³⁵ See, e.g., Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989) (explaining that one of NEPA's purpose is to ensure that "relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision"); Lemon v. Geren, 514 F.3d 1312, 1315 (D.C. Cir. 2008) ("The idea behind NEPA is that if the agency's eyes

attribute discrete, quantifiable, physical effects on the environment." But that does not excuse the Commission's failure to evaluate these emissions. As an initial matter, the lack of a single methodology does not prevent the Commission from adopting a methodology, even if that methodology is not universally accepted. The Commission has several tools to assess the harm from the Project's contribution to climate change, including, for example, the Social Cost of Carbon. By measuring the long-term damage done by a ton of carbon dioxide, the Social Cost of Carbon links GHG emissions to actual environmental effects from climate change, thereby facilitating the necessary "hard look" at the Project's environmental impacts that NEPA requires. Especially when it comes to a global problem like climate change, a measure for translating a single project's climate change impacts into concrete and comprehensible terms plays a useful role in the NEPA process by putting the harms from climate change in terms that are readily accessible for both agency decisionmakers and the public at large. The Commission, however, continues to ignore the tools at its disposal, relying on deeply flawed reasoning that I have previously critiqued at length.³⁷

15. Regardless of tools or methodologies available, the Commission also can use its expertise to consider all factors and determine, quantitatively or qualitatively, whether the Project's GHG emissions have a significant impact on climate change. That is precisely what the Commission does in other aspects of its environmental review. Consider, for example, the Commission's findings that the Project will not have a significant effect on issues as diverse as "vegetation," "wildlife," or "visual resources" (including "scenic byways"). Notwithstanding the lack of any "universally accepted" methodology or "significance criteria" to assess these impacts, the Commission managed to use its

are open to the environmental consequences of its actions and if it considers options that entail less environmental damage, it may be persuaded to alter what it proposed.").

³⁶ Certificate Order, 170 FERC ¶ 61,045 at P 129; EA at B-235.

³⁷ See, e.g., Transcontinental Gas Pipe Line Co., LLC, 167 FERC ¶ 61,110 (2019) (Glick, Comm'r, dissenting in part at P 6 & n.11) (noting that the Social Cost of Carbon "gives both the Commission and the public a means to translate a discrete project's climate impacts into concrete and comprehensible terms"); Fla. Se. Connection, LLC, 164 FERC ¶ 61,099 (2018) (Glick, Comm'r, dissenting).

³⁸ EA at B-84, B-90.

³⁹ *Id.* at B-94–B-103.

⁴⁰ *Id.* at B-149–B-153.

judgment to conduct a qualitative review and assess the significance of the Project's effect on those considerations. The Commission's refusal to, at the very least, exercise similar qualitative judgment to assess the significance of GHG emissions here is arbitrary and capricious.⁴¹

- 16. That refusal is even more mystifying because NEPA "does not dictate particular decisional outcomes." NEPA "merely prohibits uninformed—rather than unwise—agency action." In other words, taking the matter seriously—and rigorously examining a project's impacts on climate change—does not necessarily prevent any Commissioner from ultimately concluding that a project meets the public interest standard.
- 17. Even if the Commission were to determine that a project's GHG emissions are significant, that would not be the end of the inquiry nor would it mean that the project is not in the public interest or required by the public convenience and necessity. Instead, the Commission could require mitigation—as the Commission often does with regard to other environmental impacts. The Supreme Court has held that, when a project may cause potentially significant environmental impacts, the relevant environmental impact statement must "contain a detailed discussion of possible mitigation measures" to address adverse environmental impacts. The Court explained that, "[w]ithout such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects" of a project, making an examination of possible mitigation measures necessary to ensure that the agency has taken a "hard look" at the environmental consequences of the action at issue. The Commission not only has the obligation to discuss mitigation of adverse environmental impacts under NEPA, but also

⁴¹ After all, the standard the Commission typically uses for evaluating significance is whether the adverse impact would result in a substantial adverse change in the physical environment. *See*, *e.g.*, *id*. at B-1. Surely that standard is open to some subjective interpretation by each Commissioner. What today's order does not explain is why it is appropriate to exercise subjective interpretation and judgment when it comes to impacts such as wildlife and scenic byways, but not climate change.

⁴² Sierra Club v. U.S. Army Corps of Engineers, 803 F.3d 31, 37 (D.C. Cir. 2015).

⁴³ *Id.* (quoting *Robertson*, 490 U.S. at 351).

⁴⁴ *Robertson*, 490 U.S. at 351.

⁴⁵ *Id.* at 352; *see also* 40 C.F.R. §§ 1508.20 (defining mitigation), 1508.25 (including in the scope of an environmental impact statement mitigation measures).

the authority to condition certificates under section 7 of the NGA, 46 which could encompass measures to mitigate a project's GHG emissions.

18. Furthermore, a rigorous examination and determination of significance regarding climate change impacts would bolster any finding of public interest by providing the Commission a more complete set of information necessary to weigh benefits against adverse effects. By refusing to assess significance, however, the Commission short circuits any discussion of mitigation measures for the Project's GHG emissions, eliminating a potential pathway for us to achieve consensus on whether the Project is consistent with the public interest.

* * *

19. Today's order is not the product of reasoned decisionmaking. Its analysis of the Project's contribution to climate change is shoddy and its conclusion that the Project will not have any significant environmental impacts is illogical. After all, the Commission itself acknowledges that the Project will contribute to climate change, but refuses to consider whether that contribution might be significant before proclaiming that the Project will have no significant environmental impacts. So long as that is the case, the record simply cannot support the Commission's conclusion that there will be no significant environmental impacts. Simply put, the Commission's analysis of the Project's consequences for climate change does not represent the "hard look" that the law requires.

Richard Glick		
Commissioner		
Commissioner		

For these reasons, I respectfully dissent in part.

⁴⁶ 15 U.S.C. § 717f(e); Certificate Order, 169 FERC ¶ 61,133 at P 139 ("[T]he Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources . . . , including authority to impose any additional measures deemed necessary").

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Columbia Gas Transmission, LLC

Docket Nos. CP18-137-000

(Issued January 23, 2020)

McNAMEE, Commissioner, concurring:

- 1. Today's order issues Columbia Gas Transmission, LLC (Columbia) a certificate to construct and operate its proposed Buckeye XPress Project (Project). I agree that the order complies with the Commission's statutory responsibilities under the Natural Gas Act (NGA) and the National Environmental Policy Act (NEPA). The order determines that the Project is in the public convenience and necessity, finding that the Project will not adversely affect Columbia's existing customers or competitor pipelines and their captive customers, and the Project is designed to minimize adverse impacts on landowners. The order also finds that the Project will not significantly affect the environment. Further, the Commission quantified and considered greenhouse gas (GHG) emissions that are directly associated with the construction and operation of the Project, consistent with the holding in Sierra Club v. FERC (Sabal Trail).
- 2. Although I fully support this order, I write separately to address what I perceive to be a misinterpretation of the Commission's authority under the NGA and NEPA. There have been contentions that the NGA authorizes the Commission to deny a certificate application based on the environmental effects that result from the upstream production and downstream use of natural gas, that the NGA authorizes the Commission to establish measures to mitigate GHG emissions, and that the Commission violates the NGA and

¹ Columbia Gas Transmission, LLC, 170 FERC ¶ 61,045 (2020).

² Id. PP 16-20.

³ *Id.* P 138.

⁴ Environmental Assessment (EA) at B-177 – B-178; *Columbia Gas Transmission, LLC*, 170 FERC ¶ 61,045 at P 130.

⁵ 867 F.3d 1357 (D.C. Cir. 2017). This case is commonly referred to as "Sabal Trail" because the Sabal Trail Pipeline is one of the three pipelines making up the Southeast Market Pipelines Project.

NEPA by not determining whether GHG emissions significantly affect the environment. I disagree.

- 3. A close examination of the statutory text and foundation of the NGA demonstrates that the Commission does not have the authority under the NGA or NEPA to deny a pipeline certificate application based on the environmental effects of the upstream production or downstream use of natural gas nor does the Commission have the authority to unilaterally establish measures to mitigate GHG emissions. Further, the Commission has no objective basis to determine whether GHG emissions will have a significant effect on climate change nor the authority to establish its own basis for making such a determination.
- 4. It is my intention that my discussion of the statutory text and foundation will assist the Commission, the courts, and other parties in their arguments regarding the meaning of the "public convenience and necessity" and the Commission's consideration of a project's effect on climate change. Before I offer my arguments, it is important that I further expound on the current debate.

I. <u>Current debate</u>

5. When acting on a certificate application, the Commission has two primary statutory obligations: (1) to determine whether the project is required by the "public convenience and necessity" as required by the NGA; and (2) to take a "hard look" at the direct, indirect, and cumulative effects of the proposed action as required by NEPA and the Council on Environmental Quality's (CEQ) implementing regulations. Recently, there has been much debate concerning what factors the Commission can consider in

⁶ 15 U.S.C. § 717f(e) (2018).

⁷ Direct effects are those "which are caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a) (2019).

⁸ Indirect effects are those "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b) (2019). The U.S. Supreme Court held that NEPA requires an indirect effect to have "a reasonably close causal relationship" with the alleged cause; "a 'but for' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA and the relevant regulations." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 767 (2004).

⁹ Cumulative effects are those "which result[] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7 (2019).

determining whether a proposed project is in the "public convenience and necessity," and whether the effects of upstream production and downstream use of natural gas are indirect effects of a certificate application as defined by NEPA.

- 6. My colleague equates "public convenience and necessity" with a "public interest" standard, arguing that such a standard requires the Commission to weigh GHGs emitted from the Project facilities and related to the upstream production and downstream use of natural gas. ¹⁰ In support of his contention, my colleague cites the holding in *Sabal Trail* and dicta in *Atlantic Refining Co. v. Public Service Commission of State of New York* (*CATCO*). ¹¹ My colleague argues that the Commission must determine whether GHG emissions have a significant impact on climate change in order for climate change to "play a meaningful role in the Commission's public interest determination." ¹² And he argues that by not determining the significance of those emissions, the "public interest determination [] systematically excludes the most important environmental consideration of our time" and "is contrary to law, arbitrary and capricious" and is not "the product of reasoned decisionmaking." ¹³
- 7. My colleague also argues that the emissions from all downstream use of natural gas are indirect effects of the Project and must be considered in the Commission's EA.¹⁴ He argues that the Commission must also consider GHG emissions from upstream natural gas production.¹⁵ He asserts that the Commission must determine whether GHG emissions will have a significant effect on climate change and that the Commission could make that determination using the Social Cost of Carbon or its own expertise.¹⁶ Further,

¹⁰ Columbia Gas Transmission, LLC, 170 FERC ¶ 61,045 at PP 2, 5 (Glick, Comm'r, dissenting) (Dissent).

¹¹ *Id.* P 5 n.9 (citing *CATCO*, 360 U.S. 378, 391 (1959)). The case *Atlantic Refining Co. v. Public Service Commission of State of New York* is commonly known as "*CATCO*" because the petitioners were sometimes identified by that name.

¹² Dissent P 6.

¹³ *Id*.

¹⁴ *Id.* P 10.

¹⁵ *Id.* P 12.

¹⁶ *Id.* PP 13-15.

he contends that the Commission could mitigate any GHG emissions in the event that it made a finding that the GHG emissions had a significant impact on climate change.¹⁷

- 8. Several recent cases before the United States Court of Appeals for the D.C. Circuit have also considered the Commission's obligations under the NGA and NEPA as they apply to what environmental effects the Commission is required to consider under NEPA. In Sabal Trail, the D.C. Circuit vacated and remanded the Commission's order issuing a certificate for the Southeast Market Pipelines Project, finding that the Commission inadequately assessed GHGs emitted from downstream power plants in its environmental impact statement (EIS) for the project. In the court held that the downstream GHG emissions resulting from burning the natural gas at the power plants were a reasonably foreseeable indirect effect of authorizing the project and, at a minimum, the Commission should have estimated those emissions.
- 9. Further, the *Sabal Trail* court found the Commission's authorization of the project was the legally relevant cause of the GHGs emitted from the downstream power plants "because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment." The court stated the Commission could do so because, when considering whether pipeline applications are in the public convenience and necessity, "FERC will balance 'the public benefits against the adverse effects of the project,' *see Minisink Residents for Envtl. Pres. & Safety v. FERC*, 762 F.3d 97, 101-02 (D.C. Cir. 2014) (internal quotation marks omitted), including adverse environmental effects, *see Myersville Citizens for a Rural Cmty. v. FERC*, 783 F.3d 1301, 1309 (D.C.

¹⁸ The courts have not explicitly opined on whether the Commission is required to determine whether GHG emissions will have a significant impact on climate change or whether the Commission must mitigate GHG emissions. The D.C. Circuit, however, has suggested that the Commission is not required to determine whether GHG emissions are significant. *Appalachian Voices v. FERC*, 2019 WL 847199, *2 (D.C. Cir. Feb. 19, 2019) (unpublished) ("FERC provided an estimate of the upper bound of emissions resulting from end-use combustion, and it gave several reasons why it believed petitioner's preferred metric, the Social Cost of Carbon, is not an appropriate measure of project-level climate change impacts and their significance under NEPA or the Natural Gas Act. That is all that is required for NEPA purposes.").

¹⁷ *Id.* P 17.

¹⁹ Sabal Trail, 867 F.3d 1357.

²⁰ *Id.* at 1373.

Cir. 2015)."²¹ Relying on its finding that the Commission could deny a pipeline on environmental grounds, the court distinguished *Sabal Trail* from the Supreme Court's holding in *Public Citizen*, where the Court held "when the agency has no *legal* power to prevent a certain environmental effect, there is no decision to inform, and the agency need not analyze the effect in its NEPA review"²² and the D.C. Circuit's decision in *Sierra Club v. FERC (Freeport)*, where it held "that FERC had *no legal authority to prevent* the adverse environmental effects of natural gas exports."²³

- 10. Based on these findings, the court concluded that "greenhouse-gas emissions are an indirect effect of authorizing this project, which FERC could reasonably foresee, and which the agency has legal authority to mitigate." The court also held "the EIS for the Southeast Market Pipelines Project should have either given a quantitative estimate of the downstream greenhouse emissions . . . or explained more specifically why it could not have done so." The court impressed that "[it did] not hold that quantification of greenhouse-gas emissions is required *every* time those emissions are an indirect effect of an agency action" and recognized that "in some cases quantification may not be feasible." ²⁶
- 11. More recently, in *Birckhead v. FERC*,²⁷ the D.C. Circuit commented in dicta on the Commission's authority to consider downstream emissions. The court stated that because the Commission could "deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is the legally relevant cause of the direct and indirect environmental effects of pipelines it approves'—even

²¹ *Id*.

²² Sabal Trail, 867 F.3d at 1372 (citing *Pub. Citizen*, 541 U.S. at 770) (emphasis in original).

²³ *Id.* at 1373 (citing *Freeport*, 827 F.3d 36, 47 (D.C. Cir. 2016)) (emphasis in original).

²⁴ *Id.* at 1374 (citing 15 U.S.C. § 717f(e)).

²⁵ Id.

²⁶ *Id.* (emphasis in original).

²⁷ 925 F.3d 510 (D.C. Cir. 2019).

where it lacks jurisdiction over the producer or distributor of the gas transported by the pipeline."²⁸

- 12. I respect the holding of the court in *Sabal Trail* and the discussion in *Birckhead*, and I recognize that the *Sabal Trail* holding is binding on the Commission. However, I respectfully disagree with the court's finding that the Commission can, pursuant to the NGA, deny a pipeline based on environmental effects stemming from the production and use of natural gas, and that the Commission is therefore required to consider such environmental effects under the NGA and NEPA.²⁹
- 13. The U.S. Supreme Court has observed that NEPA requires an indirect effect to have "a reasonably close causal relationship" with the alleged cause. Whether there is a reasonably close causal relationship depends on "the underlying policies or legislative intent" of the agency's organic statute "to draw a manageable line between those causal changes that may make an actor responsible for an effect and those that do not." Below, my review of the text of the NGA and subsequent acts by Congress demonstrates that the "public convenience and necessity" standard in the NGA is not so broad as to include environmental effects of the upstream production or downstream use of natural gas, and that the Commission cannot be responsible for those effects. Further, my review of appellate briefs filed with the court and the Commission's orders suggests that the court may not have been presented with the arguments I make here.
- 14. As for GHGs emitted from the pipeline facilities themselves, I believe that the Commission can consider such emissions in its public convenience and necessity determination and is required to consider them in its NEPA analysis. As I set forth below, however, the Commission cannot unilaterally establish measures to mitigate GHG emissions, and there currently is no suitable method for the Commission to determine whether GHG emissions are significant.

²⁸ *Id.* (citing *Sabal Trail*, 867 F.3d at 1373) (internal quotations omitted).

²⁹ Though the D.C. Circuit's holding in *Sabal Trail* is binding on the Commission, it is not appropriate to expand that holding through the dicta in *Birckhead* so as to establish new authorities under the NGA and NEPA. The Commission is still bound by the NGA and NEPA as enacted by Congress, and interpreted by the U.S. Supreme Court and the D.C. Circuit. Our obligation is to read the statutes and case law in harmony. This concurrence articulates the legal reasoning by which to do so.

³⁰ Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 (1983)

³¹ *Id.* at 774 n.7.

II. The NGA does not permit the Commission to deny a certificate application based on environmental effects related to the upstream production or downstream use of natural gas

15. To interpret the meaning of "public convenience and necessity," we must begin with the text of the NGA.³² I recognize that the Commission³³ and the courts have equated the "public convenience and necessity" standard with "all factors bearing on the public interest." However, the phrase "all factors bearing on the public interest" does not mean that the Commission has "broad license to promote the general public welfare" or address greater societal concerns. Rather, the courts have stated that the words must "take meaning from the purposes of regulatory legislation." The Court has

[&]quot;public interest" is not included in NGA section 7(c)(1)(A) (requiring pipelines to have a certificate) or NGA section 7(e) (requiring the Commission to issue certificates). Rather, these provisions use the phrase "public convenience and necessity." NGA section 7(c)(1)(B) does refer to public interest when discussing how the Commission can issue a temporary certificate in cases of emergency. *Id.* § 717f(c)(1)(B). Congress is "presumed to have used no superfluous words." *Platt v. Union Pac. R.R. Co.*, 99 U.S. 48, 58 (1878); see also U.S. ex rel. Totten v. Bombardier Corp., 380 F.3d 488, 499 (D.C. Cir. 2004) ("It is, of course, a 'cardinal principle of statutory construction that a statute ought, upon the whole, to be so construed that, if it can be prevented, no clause, sentence, or word shall be superfluous, void, or insignificant." (citing Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461, n.13 (2004))).

³³ See, e.g., North Carolina Gas Corp., 10 FPC 469, 475 (1950).

³⁴ *CATCO*, 360 U.S. at 391 ("This is not to say that rates are the only factor bearing on the public convenience and necessity, for § 7(e) requires the Commission to evaluate all factors bearing on the public interest."). The Court never expounded further on that statement.

³⁵ NAACP v. FERC, 425 U.S. 662, 669 (1976).

³⁶ *Id.*; see also Office of Consumers' Counsel v. FERC, 655 F.2d 1132, 1147 (D.C. Cir. 1980) ("Any such authority to consider all factors bearing on the 'public interest' must take into account what the 'public interest' means in the context of the Natural Gas Act. FERC's authority to consider all factors bearing on the public interest when issuing certificates means authority to look into those factors which reasonably relate to the purposes for which FERC was given certification authority. It does not imply authority to issue orders regarding any circumstance in which FERC's regulatory tools might be useful.").

made clear that statutory language "cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme."³⁷ The Court has further instructed that one must "construe statutes, not isolated provisions."³⁸

- 16. Indeed, that is how the Court in *CATCO* the first U.S. Supreme Court case including the "all factors bearing on the public interest" language interpreted the phrase "public convenience and necessity." In that case, the Court held that the public convenience and necessity requires the Commission to closely scrutinize initial rates based on the framework and text of the NGA.³⁹
- 17. Following this precedent, the phrase "public convenience and necessity" must therefore be read within the overall statutory scheme of the NGA. As set forth below, construing the NGA as a statute demonstrates that Congress determined the public interest required (i) the public to have access to natural gas and (ii) economic regulation of the transportation and sale of natural gas to protect such public access.

³⁷ Davis v. Mich. Dep't of Treasury, 489 U.S. 803, 809 (1989).

³⁸ Graham Cty. Soil & Water Conservation Dist. v. U.S. ex rel. Wilson, 559 U.S. 280, 290 (2010) (quoting Gustafson v. Alloyd Co., 513 U.S. 561, 568 (1995)).

³⁹ CATCO, 360 U.S. 378, 388-91. The Court stated "[t]he Act was so framed as to afford consumers a complete, permanent and effective bond of protection from excessive rates and charges." *Id.* at 388. The Court found that the text of NGA sections 4 and 5 supported the premise that Congress designed the Act to provide complete protection from excessive rates and charges. *Id.* ("The heart of the Act is found in those provisions requiring . . . that all rates and charges 'made, demanded, or received' shall be 'just and reasonable.""); *id.* at 389 ("The overriding intent of the Congress to give full protective coverage to the consumer as to price is further emphasized in § 5 of the Act"). The Court recognized that the Commission's role in setting initial rates was a critical component of providing consumers complete protection because "the delay incident to determination in § 5 proceedings through which initial certificated rates are reviewable appears nigh interminable" and "would provide a windfall for the natural gas company with a consequent squall for the consumers," which "Congress did not intend." *Id.* at 389-90.

A. The text of the NGA does not support denying a certificate application based on the environmental effects of the upstream production or downstream use of natural gas

1. NGA section 1(a)—limited meaning of "public interest"

- 18. Section 1 of the NGA sets out the reason for its enactment. NGA section 1(a) states, "[a]s disclosed in reports of the Federal Trade Commission [(FTC)] made pursuant to S. Res. 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is declared that the business of transporting and selling natural gas for ultimate distribution to the public *is affected with a public interest*, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the *public interest*."⁴⁰
- 19. A review of the FTC Report referred to in NGA section 1 demonstrates that the NGA was enacted to counter activities that would limit the public's access to natural gas and subject the public to abusive pricing. Specifically, the FTC Report stated "[a]ll communities and industries within the capacity and reasonable distance of existing or future transmission facilities should be assured a natural-gas supply and receive it at fair, nondiscriminatory prices." ⁴¹
- 20. The FTC Report further stated "[a]ny proposed Federal legislation should be premised, in part at least, on the fact that natural gas is a valuable, but limited, natural resource in Nation-wide demand, which is produced only in certain States and limited areas, and the conservation, production, transportation, and distribution of which, therefore, under proper control and regulation, are matters charged with high national public interest."⁴²
- 21. The text of NGA section 1(a) and its reference to the FTC Report make clear that "public interest" is directly linked to ensuring the public's access to natural gas through

⁴⁰ 15 U.S.C. § 717(a) (2018) (emphasis added).

⁴¹ FEDERAL TRADE COMMISSION, UTILITY CORPORATIONS FINAL REPORT OF THE FEDERAL TRADE COMMISSION TO THE SENATE OF THE UNITED STATES PURSUANT TO SENATE RESOLUTION NO. 83, 70TH CONGRESS, 1ST SESSION ON ECONOMIC, CORPORATE, OPERATING, AND FINANCIAL PHASES OF THE NATURAL-GAS-PRODUCING, PIPE-LINE, AND UTILITY INDUSTRIES WITH CONCLUSIONS AND RECOMMENDATIONS NO. 84-A at 609 (1936) (FTC Report), https://babel.hathitrust.org/cgi/pt?id=ien.355560213 51598&view=1up&seq=718.

⁴² *Id.* at 611.

regulating its transport and sale. Moreover, the NGA is designed to promote the "public interest" primarily through economic regulation. This is apparent in the text of the NGA and by its reference to the FTC Report that identified the concern with monopolistic activity that would limit access to natural gas.⁴³

22. Therefore, there is no textual support in NGA section 1 for the claim that the Commission may deny a pipeline application due to potential upstream and downstream effects of GHG emissions on climate change. But, this is not the end of the analysis. We must also examine the Commission's specific authority under the NGA section 7.

2. NGA section 7—Congress grants the Commission and pipelines authority to ensure the public's access to natural gas

- 23. Like NGA section 1, the text of NGA section 7 makes clear that its purpose is to ensure that the public has access to natural gas. A review of the various provisions of NGA section 7 make this point evident:
 - Section 7(a) authorizes the Commission to "direct a natural-gas company to extend or improve its transportation facilities, to establish physical connection of its transportation facilities with the facilities of, and sell

⁴³ 15 U.S.C. § 717(a) (2018) ("Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest"). The limited, economic regulation meaning of "public interest" was clear at the time the NGA was adopted. The NGA's use of the phrase "affected with the public interest" is consistent with the States' use of this phrase when enacting laws regulating public utilities. Historically, state legislatures used the phrase "affected with the public interest" as the basis of their authority to regulate rates charged for the sale of commodities, rendered services, or use of private property. Munn v. Illinois, 94 U.S. 113, 125-26 (1876). The Court found that businesses affected with a public interest or "said to be clothed with a public interest justifying some public regulation" include "[b]usinesses, which, though not public at their inception, may be fairly said to have risen to be such and have become subject in consequence to some government regulation." Charles Wolff Packing Co. v. Court of Indus. Relations, 262 U.S. 522, 535 (1923). In essence, these businesses became quasi-public enterprises and were determined to have an "indispensable nature." Id. at 538. Such a conclusion also meant that if these businesses were not restrained by the government, the public could be subject to "the exorbitant charges and arbitrary control to which the public might be subjected without regulation." Id.

natural gas... to the public...."⁴⁴ The Commission has stated that "[s]ection 7(a) clearly established the means whereby the Commission could secure *the benefits* of gas service for certain communities, markets and territories adjacent to those originally established by the gas industry, where in the public interest."⁴⁵

- Section 7(b) requires Commission approval for a natural gas pipeline company to "abandon all or any portion of its facilities subject to the jurisdiction of the Commission, or any service rendered by means of such facilities." That is, Congress considered access to natural gas to be so important that it even prohibited natural gas pipeline companies from abandoning service without Commission approval.
- Section 7(c)(1)(B) authorizes the Commission to "issue a temporary certificate in cases of emergency, to assure maintenance of adequate service or to serve particular customers, without notice or hearing, pending the determination of an application for a certificate."⁴⁷ The underlying presumption of this section is that the need for natural gas can be so important that the Commission can issue a certificate without notice and hearing.
- Section 7(e) states "a certificate *shall* be issued" when a project is in the public convenience and necessity, ⁴⁸ leaving the Commission no discretion after determining a project meets the public convenience and necessity standard.
- Section 7(h) grants the pipeline certificate holder the powers of the sovereign to "exercise of the right of eminent domain in the district court of

⁴⁴ 15 U.S.C. § 717f(a) (2018).

⁴⁵ Arcadian Corp. v. Southern Nat. Gas Co., 61 FERC ¶ 61,183, at 61,676 (1992) (emphasis added). The Commission's analysis in this regard was unaffected by the opinion in Atlanta Gas Light Co. v. FERC, 140 F.3d 1392 (11th Cir. 1998) (vacating the Commission's 1991 and 1992 orders on other grounds).

⁴⁶ 15 U.S.C. § 717f(b) (2018).

⁴⁷ *Id.* § 717f(c)(1)(B).

⁴⁸ *Id.* § 717f(e) (emphasis added).

the United States."⁴⁹ By granting the power of eminent domain, Congress made clear the importance of ensuring that natural gas could be delivered from its source to the public by not allowing traditional property rights to stand in the way of pipeline construction. Furthermore, the sovereign's power of eminent domain must be for a public use⁵⁰ and Congress considered natural gas pipelines a public use.

- 24. Each of these textual provisions illuminate the ultimate purpose of the NGA: to ensure that the public has access to natural gas because Congress considered such access to be in the public interest.⁵¹ To now interpret "public convenience and necessity" to mean that the Commission has the authority to deny a certificate for a pipeline due to upstream or downstream emissions because the pipeline may result in access to, and the use of, natural gas would radically rewrite the NGA and undermine its stated purpose.
 - 3. NGA section 1(b) and section 201 of the Federal Power
 Act (FPA)—authority over environmental effects related
 to the upstream production and downstream use of
 transported natural gas reserved to States
- 25. Statutory text also confirms that control over the physical environmental effects related to the upstream production and downstream use of natural gas are squarely reserved for the States. NGA section 1(b) provides that "[t]he provisions of this chapter . . . shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities for such distribution or to the production or gathering of natural gas." The Ninth Circuit and the D.C. Circuit have interpreted the

⁴⁹ *Id.* § 717f(h).

⁵⁰ Miss. & Rum River Boom Co. v. Patterson, 98 U.S. 403, 406 (1878) ("The right of eminent domain, that is, the right to take private property for public uses, appertains to every independent government.").

⁵¹ This interpretation is also supported by the Commission's 1999 Certificate Policy Statement. *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227, 61,743 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement) ("[I]t should be designed to foster competitive markets, protect captive customers, and avoid unnecessary environmental and community impacts *while serving increasing demands for natural gas.*") (emphasis added); *id.* at 61,751 ("[T]he Commission is urged to authorize new pipeline capacity to meet an anticipated increase in demand for natural gas").

⁵² 15 U.S.C. § 717(b) (2018); *see Pennzoil v. FERC*, 645 F.2d 360, 380-82 (5th Cir. 1981) (holding that FERC lacks the power to even interpret gas purchase

reference to distribution as meaning that States have exclusive authority over the gas once the gas moves beyond high-pressure mainlines.⁵³ Likewise, FPA section 201 specifically reserves the authority to make generation decisions to the States.⁵⁴

26. U.S. Supreme Court precedent and legislative history confirm that the regulation of the physical upstream production and downstream use of gas is reserved for the States.⁵⁵ The Court has observed that Congress enacted the NGA to address "specific

agreements between producers and pipelines for the sale of gas that has been removed from NGA jurisdiction).

⁵³ See S. Coast Air Quality Mgmt. Dist. v. FERC, 621 F.3d 1085, 1092 (9th Cir. 2010) ("In sum, the history and judicial construction of the Natural Gas Act suggest that all aspects related to the direct consumption of gas . . . remain within the exclusive purview of the states."); Pub. Utils. Comm'n of Cal. v. FERC, 900 F.2d 269, 277 (D.C. Cir. 1990) ("[T]he state . . . has authority over the gas once it moves beyond the high-pressure mains into the hands of an end user."). I note that the court in Sabal Trail did not discuss or distinguish Public Utilities Commission of State of Cal v. FERC.

54 16 U.S.C. § 824(b)(1) (2018) ("The Commission . . . shall not have jurisdiction, except as specifically provided in this subchapter and subchapter III of this chapter, over facilities used for the generation of electric energy"). Despite Congress explicitly denying the Commission jurisdiction over generation decisions in the FPA, some argue that the Commission has the authority to prevent natural gas generation through general language in the NGA regarding public convenience and necessity. Such an approach violates the principle that explicit language trumps general provisions. *See, e.g.*, *Passamaquoddy Tribe v. State of Me.*, 897 F. Supp. 632, 635 ("In this case, the unequivocal language in the Maine Settlement Act clearly trumps the Gaming Act's general provisions that are silent as to Maine.").

55 Some will argue that the Court's dicta in FPC v. Hope Natural Gas Co. (Hope)—"[t]he Commission is required to take account of the ultimate use of the gas," 320 U.S. 591, 639 (1944)—means that the Commission can consider environmental effects related to the downstream use of natural gas. However, such argument takes the Court's statement out of context. In fact, that Court makes that statement in support of its argument that while the 1942 amendments to the NGA eliminated the language, "the intention of Congress that natural gas shall be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest," "there is nothing to indicate that it was not and is still not an accurate statement of purpose of the Act." *Id.* at 638. Such argument further supports that Congress enacted the NGA to provide access to natural gas and to protect consumers

evils" related to non-transparent rates for the interstate transportation and sale of natural gas and the monopoly power of holding companies that owned natural gas pipeline company stock.⁵⁶ The Court has also found that Congress enacted the NGA to

fill the regulatory void created by the Court's earlier decisions prohibiting States from regulating interstate transportation and sales for resale of natural gas, while at the same time leaving undisturbed the recognized power of the States to regulate all in-state gas sales directly to consumers. Thus, the NGA "was drawn with meticulous regard for the continued exercise of state power, not to handicap it any way."⁵⁷

from monopoly power.

⁵⁶ *Id.* at 610 ("state commissions found it difficult or impossible to discover what it cost interstate pipe-line companies to deliver gas within the consuming states"); *id.* ("[T]he investigations of the Federal Trade Commission had disclosed the majority of the pipe-line mileage in the country used to transport natural gas, together with an increasing percentage of the natural gas supply for pipe-line transportation, had been acquired by a handful of holding companies."). Senate Resolution 83, which directed the FTC to develop the report that the NGA is founded on, also demonstrates that Congress was only concerned with consumer protection and monopoly power. The resolution directed the FTC to investigate capital assets and liabilities of natural gas companies, issuance of securities by the natural gas companies, the relationship between company stockholders and holding companies, other services provided by the holding companies, adverse impacts of holding companies controlling natural gas companies, and potential legislation to correct any abuses by holding companies. FTC Report at 1.

57 Gen. Motors Corp. v. Tracy, 519 U.S. 278, 292 (1997) (internal citations omitted) (quoting Panhandle E. Pipeline Co. v. Pub. Serv. Comm'n of Ind., 332 U.S. 507, 516-22 (1947) (Panhandle)); see also Nw. Cent. Pipeline v. State Corp. Comm'n, 489 U.S. 493, 512 (1989) ("The NGA 'was designed to supplement state power and to produce a harmonious and comprehensive regulation of the industry. Neither state nor federal regulatory body was to encroach upon the jurisdiction of the other." (quoting Panhandle, 332 U.S. at 513)); Panhandle, 332 U.S. at 520 (In recognizing that the NGA articulated a legislative program recognizing the respective responsibilities of federal and state regulatory agencies, the Court noted that the NGA does not "contemplate ineffective regulatory scheme, complementary in its operation to those of the states and in no manner usurping their authority."). Congress continued to draw the NGA with meticulous regard to State power when it amended the NGA in 1954 to add the Hinshaw pipeline exemption so as "to preserve state control over local distributors who purchase gas from interstate

- 27. In *Transco*,⁵⁸ the Court also recognized that "Congress did not desire that an important aspect of this field be left unregulated."⁵⁹ Thus, the Court held that where congressional authority is not explicit and States cannot practicably regulate a given area, the Commission can consider the issue in its public convenience and necessity determination.⁶⁰
- 28. Based on this rule, and legislative history,⁶¹ the *Transco* Court found that in its public convenience and necessity determination, the Commission appropriately considered whether the end-use of the gas in a non-producing state was economically wasteful as there was a regulatory gap and no State could be expected to control how gas is used in another State.⁶² The Court also impressed that

The Commission ha[d] not attempted to exert its influence over such "physically" wasteful practices as improper well spacing and the flaring of unused gas which result in the entire loss of gas and are properly of concern to the producing State; nor has the Commission attempted to regulate the "economic" aspects of gas used within the producing State. 63

29. In contrast, there is no legislative history to support that the Commission may consider environmental effects related to the upstream production or downstream use of gas and the field of environmental regulation of such activities is not one that has been left unregulated.⁶⁴ Unlike in *Transco*, states can reasonably be expected to regulate air

pipelines." Louisiana Power & Light Co. v. Fed. Power Comm'n, 483 F.2d 623, 633 (5th Cir. 1973).

⁵⁸ Transco, 365 U.S. 1 (1961).

⁵⁹ *Id.* at 19.

⁶⁰ *Id.* at 19-20.

⁶¹ *Id.* at 10-19.

⁶² *Id.* at 20-21.

⁶³ *Id.* at 20 (emphasis added).

⁶⁴ I note that the Federal Power Commission, the Commission's predecessor, at times previously considered environmental impacts in its need analysis when weighing the beneficial use of natural gas between competing uses. The Federal Power Commission did not consider negative environmental impacts of downstream end use as a reason to deny the use of natural gas. *See, e.g., El Paso Natural Gas Co.*, 50 FPC 1264

emissions from the upstream production or downstream use of natural gas: "air pollution control at its source is the primary responsibility of States and local governments." The Clean Air Act vests States with authority to issue permits to regulate stationary sources related to upstream and downstream activities. In addition, pursuant to their police powers, States have the ability to regulate environmental effects related to the upstream production and downstream use of natural gas within their jurisdictions. The FTC

(1973) (denying a certificate because the proposed project would impact existing customers dependent on natural gas and use of gas was not needed to keep sulfur emissions within the national ambient air quality standards); Transwestern Pipeline Co., 36 FPC 176 (1966) (discussing use of gas instead of oil or coal and noting potential air pollution benefits); El Paso Nat. Gas Co., 22 FPC 900, 950 (1959) ("[T]he use of natural gas as boiler fuel in the Los Angeles area should be considered as being in a different category than gas being used for such a purpose in some other community where the smog problem does not exist and that the use of gas for boiler fuel in this area should not be considered an inferior use."); see also FPC ANNUAL REP. at 2 (1966) ("Any showing that additional gas for boiler fuel use would substantially reduce air pollution merits serious consideration. Important as this factor may be, however, it cannot be considered in isolation."). Often these orders discussed sulfur and smog air pollution that occurred in the area where the natural gas would be transported when determining need as compared to the need or use of natural gas somewhere else. All of this was premised on the Commission's NGA authority to use its public convenience and necessity authority to provide access to natural gas and to conserve gas by preventing economic waste. The Commission appears to have stopped this analysis in the late-1970s. It is noteworthy that the U.S. Environmental Protection Agency (EPA) was established in 1970, Congress established more comprehensive air emissions regulation by amending the Clean Air Act in 1970 and 1977 (Pub. L. 91-604, 84 Stat. 1676 (1970): Pub. L. 95-95, 91 Stat. 685 (1977)), and Congress enacted the Department of Energy Organization Act, which replaced the Federal Power Commission with the Federal Energy Regulatory Commission, 42 U.S.C. §§ 7101 et seq.

⁶⁵ 42 U.S.C. § 7401 (2018).

⁶⁶ *Id.* § 7661e ("Nothing in this subchapter shall prevent a State, or interstate permitting authority, from establishing additional permitting requirements not inconsistent with this chapter."). The Act defines "permitting authority" as "the Administrator or the air pollution control agency authorized by the Administrator to carry out a permit program under this subchapter." *Id.* § 7661.

⁶⁷ Huron Portland Cement Co. v. Detroit, 362 U.S. 440, 442 (1960) ("Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the more traditional concept of what is compendiously known as the

Report referenced in NGA section 1(a) recognized that States' ability to regulate the use of natural gas. And, various States have exercised this ability. For example, Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont participate in the Regional Greenhouse Gas Initiative (RGGI), which requires power plants with a capacity over 25 megawatts to hold allowances equal to their CO₂ emissions over a three-year control period. 69

Some may make the argument that "considering" the environmental effects related 30. to upstream production and downstream use is hardly "regulating" such activities. I disagree. For the Commission to consider such effects would be an attempt to exert influence over States' regulation of physical upstream production or downstream use of natural gas, which the Court in *Transco* suggested would be encroaching upon forbidden ground. If, for example, the Commission considered and denied a certificate based on the GHG emissions released from production activities, the Commission would be making a judgment that such production is too harmful for the environment and preempting a State's authority to decide whether and how to regulate upstream production of natural gas. Furthermore, for the Commission to consider and deny a project based on emissions from end users, the Commission would be making a judgment that natural gas should not be used for certain activities. 70 Such exertion of influence is impermissible: "when the Congress explicitly reserves jurisdiction over a matter to the states, as here, the Commission has no business considering how to 'induc[e] a change [of state] policy' with respect to that matter."71

police power.").

⁶⁸ FTC Report at 716 (describing Louisiana) ("The department of conservation be, and it is hereby, given supervision over the production and use of natural gas in connection with the manufacture of carbon black in other manufacturing enterprises and for domestic consumption.").

⁶⁹ REGIONAL GREENHOUSE GAS INITIATIVE, https://www.rggi.org/program-overview-and-design/elements (LAST ACCESSED NOV. 18, 2019).

⁷⁰ See also Myersville Citizens for a Rural Cmty., Inc. v. FERC, 783 F.3d 1301, 1320 (D.C. Cir. 2015) ("The Commission's power to preempt state and local regulation by approving the construction of natural gas facilities is limited by the Natural Gas Act's savings clause, which provides that the Natural Gas Act's terms must not be construed to 'affect[] the rights of States' under the Clean Air Act. 15 U.S.C. § 717b(d)(2)."); Dominion Transmission, Inc. v. Summers, 723 F.3d 238, 243 (D.C. Cir. 2013) ("But Congress expressly saved states' [Clean Air Act] powers from preemption.").

⁷¹ Altamont Gas Transmission Co. v. FERC, 92 F.3d 1239, 1248 (D.C. Cir. 1996);

31. Hence, there is no jurisdictional gap in regulating GHG emissions for the Commission to fill. The NGA reserves authority over the upstream production and downstream use of natural gas to the States, and States can practicably regulate GHGs emitted by those activities. And, even if there were a gap that federal regulation could fill, as discussed below, it is nonsensical for the Commission to attempt to fill a gap that Congress has clearly meant for the U.S. Environmental Protection Agency (EPA) to occupy. Therefore, as GHG emissions from the upstream production and downstream use of natural gas are not properly of concern to the Commission, the Commission cannot deny a certificate application based on such effects.

B. <u>Denying a pipeline based on upstream or downstream</u> environmental effects would undermine other acts of Congress

32. Since enactment of the NGA and NEPA, Congress has enacted additional legislation promoting the development and use of natural gas and limiting the Commission's authority over the natural gas commodity. Each of these legislation enactments indicates that the Commission's authority over upstream production and downstream use of natural gas has been further limited by Congress. Arguments that the Commission can rely on the NGA's public convenience and necessity standard and NEPA to deny a pipeline application so as to prevent the upstream production or downstream use of natural gas would undermine these acts of Congress.

1. Natural Gas Policy Act of 1978

33. Determining that federal regulation of natural gas limited interstate access to the commodity, resulting in shortages and high prices, Congress passed the Natural Gas Policy Act of 1978 (NGPA). The NGPA significantly deregulated the natural gas industry.⁷³ Importantly, NGPA section 601(c)(1) states, "[t]he Commission may not

see ANR Pipeline Co. v. FERC, 876 F.2d 124, 132 (D.C. Cir. 1989) ("We think it would be a considerable stretch from there to say that, in certifying transportation that is necessary to carry out a sale, the Commission is required to reconsider the very aspects of the sale that have been assessed by an agency specifically vested by Congress with authority over the subject.").

⁷² See infra PP 53-57.

⁷³ Generally, the NGPA limited the Commission's authority over gas that is not transported in interstate commerce, new sales of gas, sales of gas and transportation by Hinshaw pipelines, and certain sales, transportation and allocation of gas during certain gas supply emergencies. *See, e.g.*, NGPA sections 601(a)(1)(A)-(D), 15 U.S.C. § 3431(a)(1)(A)-(D) (2018).

deny, or condition the grant of, any certificate under section 7 of the Natural Gas Act based upon the amount paid in any sale of natural gas, if such amount is deemed to be just and reasonable under subsection (b) of this section."⁷⁴

- 34. Besides using price deregulation to promote access to natural gas, Congress gave explicit powers to the President to ensure that natural gas reached consumers. NGPA section 302(c) explicitly provides, "[t]he President may, by order, require any pipeline to transport natural gas, and to construct and operate such facilities for the transportation of natural gas, as he determines necessary to carry out any contract authorized under subsection (a)."⁷⁵ Similarly, the NGPA gave authority to the Secretary of Energy to promote access to natural gas.⁷⁶
- 35. There can be no doubt about the plain language of the NGPA: the Court observed that Congress passed the NGPA to "promote gas transportation by interstate and

⁷⁴ *Id.* § 3431(c)(1) (2018). In addition, section 121(a) provides, "the provisions of subtitle A respecting the maximum lawful price for the first sale of each of the following categories of natural gas shall, except as provided in subsections (d) and (e), cease to apply effective January 1, 1985." 15 U.S.C. § 3331(a), *repealed by* the Wellhead Decontrol Act of 1989, Pub. L. 101-60 § 2(b), 103 Stat. 157 (1989).

⁷⁵ *Id.* § 3362.

⁷⁶ See id. § 3391(a) ("[T]he Secretary of Energy shall prescribe and make effective a rule . . . which provides . . . no curtailment plan of an interstate pipeline may provide for curtailment of deliveries for any essential agricultural use"); id. § 3392(a) ("The Secretary of Energy shall prescribe and make effective a rule which provides that notwithstanding any other provisions of law (other than subsection (b)) and to the maximum extent practicable, no interstate pipeline may curtail deliveries of natural gas for any essential industrial process or feedstock use. . . ."); id. § 3392(a) ("The Secretary of Energy shall determine and certify to the Commission the natural gas requirements (expressed either as volumes or percentages of use) of persons (or classes thereof) for essential industrial process and feedstock uses (other than those referred to in section 3391(f)(1)(B))."); id. § 3393(a) ("The Secretary of Energy shall prescribe the rules under sections 3391 and 3392 of this title pursuant to his authority under the Department of Energy Organization Act to establish and review priorities for curtailments under the Natural Gas Act.").

intrastate pipelines."⁷⁷ Furthermore, the NGPA was "intended to provide investors with adequate incentive to develop new sources of supply."⁷⁸

2. Powerplant and Industrial Fuel Use Act of 1978

36. With respect to natural gas as a fuel source for electric generation, in 1987 Congress repealed sections of the Powerplant and Industrial Fuel Use Act of 1978 (Fuel Use Act), which had restricted the use of natural gas in electric generation so as to conserve it for other uses. With the repeal of the Fuel Use Act, Congress made clear that natural gas could be used for electric generation and that the regulation of the use of natural gas by power plants unnecessary. 80

3. Natural Gas Wellhead Decontrol Act of 1989

37. If there were any remaining doubt that the Commission has no authority to consider the upstream development of natural gas and its environmental effects, such

⁷⁷ Gen. Motors Corp. v. Tracy, 519 U.S. at 283 (quoting 57 Fed. Reg. 13271 (Apr. 16, 1992)).

⁷⁸ Pub. Serv. Comm'n of State of N.Y. v. Mid-Louisiana Gas Co., 463 U.S. 319, 334 (1983).

⁷⁹ 42 U.S.C. § 8342, repealed by Pub. L. 100-42, § 1(a), 101 Stat. 310 (1987).

⁸⁰ The Commission need not look any further than the text of the statutes to determine its authority. In the case of the repeal of the Fuel Use Act, the legislative history is informative as to Congress's reasoning. See H.R. Rep. 100-78 *2 ("By amending [Fuel Use Act], H.R. 1941 will remove artificial government restrictions on the use of oil and gas; allow energy consumers to make their own fuel choices in an increasingly deregulated energy marketplace; encourage multifuel competition among oil, gas, coal, and other fuels based on their price, availability, and environmental merits; preserve the 'coal option' for new baseload electric powerplants which are long-lived and use so much fuel; and provide potential new markets for financially distress oil and gas producers."); id. *6 ("Indeed, a major purpose of this bill is to allow individual choices and competition and fuels and technologies "); see also President Ronald Reagan's Remarks on Signing H.R. 1941 Into Law, 23 WEEKLY COMP. PRES. DOC. 568, (May 21, 1987) ("This legislation eliminates unnecessary restrictions on the use of natural gas. It promotes efficient production and development of our energy resources by returning fuel choices to the marketplace. I've long believed that our country's natural gas resources should be free from regulatory burdens that are costly and counterproductive.").

doubt was put to rest when Congress enacted the Wellhead Decontrol Act.⁸¹ In this legislation, Congress specifically removed the Commission's authority over the upstream production of natural gas.⁸²

38. But the Wellhead Decontrol Act was not merely about deregulating upstream natural gas production, Congress explained that the reason for deregulating natural gas at the wellhead was important to ensuring that end users had access to the commodity. The Senate Committee Report for the Decontrol Act stated "the purpose (of the legislation) is to promote competition for natural gas at the wellhead *to ensure consumers an adequate and reliable supply of natural gas at the lowest reasonable price.*" Similarly, the House Committee Report to the Decontrol Act noted, "[a]ll sellers must be able to reasonably reach the highest-bidding buyer in an increasingly national market. All buyers must be free to reach the lowest-selling producer, and obtain shipment of its gas to them on even terms with other suppliers." The House Committee Report also stated the Commission's "current competitive 'open access' pipeline system [should be] maintained." With this statement, the House Committee Report was referencing Order No. 436 in which the Commission stated that open access transportation "is designed to remove any unnecessary regulatory obstacles and to facilitate transportation of gas to any end user that requests transportation service."

⁸¹ Pub. L. 101-60, 103 Stat. 157 (1989).

⁸² The Wellhead Decontrol Act amended NGPA section 601(a)(1)(A) to read, "[f]or purposes of section 1(b) of the Natural Gas Act, the provisions of the Natural Gas Act and the jurisdiction of the Commission under such Act shall not apply to any natural gas solely by reason of any first sale of such natural gas." 15 U.S.C. § 3431(a)(1)(A), amended by, Pub. L. 101-60 § 3(a)(7)(A), 103 Stat. 157 (1989). United Distrib. Cos. v. FERC, 88 F.3d 1105, 1166 (D.C. Cir. 1996) ("That enactment contemplates a considerably changed natural gas world in which regulation plays a much reduced role and the free market operates at the wellhead.").

⁸³ S. Rep. No. 101-39 at 1 (emphasis added).

⁸⁴ H.R. Rep. No. 101-29 at 6.

⁸⁵ *Id.* at 7.

⁸⁶ Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 436, 50 Fed. Reg. 42,408, 42,478 (Oct. 18, 1985) (Order No. 436).

4. Energy Policy Act of 1992

- 39. In the Energy Policy Act of 1992 (EPAct 1992), Congress also expressed a preference for providing the public access to natural gas. EPAct section 202 states, "[i[t is the sense of the Congress that natural gas consumers and producers, and the national economy, are best served by a competitive natural gas wellhead market."⁸⁷
- 40. The NGA, NGPA, the repeal of the Fuel Use Act, the Wellhead Decontrol Act, and EPAct 1992 each reflect Congressional mandates to promote the production, transportation, and use of natural gas. None of these acts, and no other law, including NEPA, modifies the presumption in the NGA to facilitate access to natural gas. And, it is not for the Commission to substitute its judgment for that of Congress in determining energy policy.
 - C. "Public convenience and necessity" does not support consideration of environment effects related to upstream production or downstream use of natural gas.
- 41. In addition to considering the text of the NGA as a whole and subsequent-related acts, we must interpret the phrase "public convenience and necessity" as used when enacted. As discussed below, "public convenience and necessity" has always been understood to mean "need" for the service. To the extent the environment is considered, such consideration is limited to the effects stemming from the construction and operation of the proposed facilities and is not as broad as some would believe. 88

⁸⁷ Pub. L. No. 102-486, 106 Stat. 2776 (1992).

argue that the Commission can consider the environmental effects upstream production and downstream use of natural gas. *NAACP v. FERC*, 425 U.S. 662, 670 n.6. The Court's statement does not support that argument. The Court states that the environment could be a subsidiary purpose of the NGA and FPA by referencing FPA section 10, which states the Commission shall consider whether a hydroelectric project is best adapted to a comprehensive waterway by considering, among other things, the proposed *hydroelectric project's effect* on the adequate protection, mitigation, and enhancement of fish and wildlife. Nothing in the Court's statement or the citation would support the consideration of upstream and downstream impacts. *See supra* note 64 (explaining the Federal Power Commission previously considered environmental impacts of downstream end use when weighing the beneficial use of natural gas between competing uses).

- 42. When Congress enacted the NGA, the phrase "public convenience and necessity" was a term of art used in state and federal public utility regulation. ⁸⁹ In 1939, one year after the NGA's enactment, the Commission's predecessor agency the Federal Power Commission, defined public convenience and necessity as "a public need or benefit without which the public is inconvenienced to the extent of being handicapped in the pursuit of business or comfort or both, without which the public generally in the area involved is denied to its detriment that which is enjoyed by the public of other areas similarly situated." To make such showing, the Commission required certificate applicants to demonstrate that the public needed its proposed project, the applicant could perform the proposed service, and the service would be provided at reasonable rates. ⁹¹
- 43. To the extent that public convenience and necessity included factors other than need, they were limited and directly related to the proposed facilities, not upstream or downstream effects related to the natural gas commodity. Such considerations included the effects on pipeline competition, duplication of facilities, and social costs, such as misuse of eminent domain and environmental impacts resulting from the creation of the right-of-way or service. For example, the Commonwealth of Massachusetts considered environmental impacts resulting from the creation of the right-of-way and service in denying an application to build a railroad along a beach. The Commonwealth found that "the demand for train service was held to be outweighed by the fact the beach traversed will cease to be attractive when it is defaced and made dangerous by a steam railroad." "93

⁸⁹ William K. Jones, *Origins of the Certificate of Public Convenience and Necessity: Developments in the States, 1870-1920*, 79 COLUM. L. REV. 426, 427-28 (1979) (Jones).

⁹⁰ Kan. Pipe Line & Gas Co., 2 FPC 29, 56 (1939).

⁹¹ See Order No. 436, at 42,474 (listing the requirements outlined in *Kan. Pipe Line & Gas Co.*: "(1) they possess a supply of natural gas adequate to meet those demands which it is reasonable to assume will be made upon them; (2) there exist in the territory proposed to be served customers who can reasonably be expected to use such natural-gas service; (3) the facilities for which they seek a certificate are adequate; (4) the costs of construction of the facilities which they propose are both adequate and reasonable; (5) the anticipated fixed charges or the amount of such fixed charges are reasonable; and (6) the rates proposed to be charged are reasonable.")

⁹² Jones at 428.

⁹³ *Id.* at 436.

- 44. The Commission's current guidance for determining whether a proposed project is in the public convenience and necessity is consistent with the historic use of the term. As outlined in its 1999 Certificate Policy Statement, the Commission implements an economic balancing test that is focused on whether there is a need for the facilities and adverse economic effects stemming from the construction and operation of the proposed facilities themselves. The Commission designed its balancing test "to foster competitive markets, protect captive customers, and avoid unnecessary environmental and community impacts while serving increasing demands for natural gas." The Commission also stated that its balancing test "provide[s] appropriate incentives for the optimal level of construction and efficient customer choices." To accomplish these objectives, the Commission determines whether a project is in the public convenience and necessity by balancing the public benefits of the project against the adverse economic impacts on the applicant's existing shippers, competitor pipelines and their captive customers, and landowners. 6
- 45. Although the Certificate Policy Statement also recognizes the need to consider certain environmental issues related to a project, it makes clear that the environmental impacts to be considered are related to the construction and operation of the pipeline itself and the creation of the right-of-way. As noted above, it is the Commission's objective to avoid *unnecessary* environmental impacts, meaning to route the pipeline to avoid environmental effects where possible and feasible, not to prevent or mitigate environmental effects from the upstream production or downstream use of natural gas. This is confirmed when one considers that if the project had unnecessary adverse environmental effects, the Commission would require the pipeline to reroute the pipeline: "If the environmental analysis following a preliminary determination indicates a preferred route other than the one proposed by the applicant, the earlier balancing of the public benefits of the project against its adverse effects would be reopened to take into

⁹⁴ Certificate Policy Statement, 88 FERC at 61,743.

⁹⁵ *Id*.

⁹⁶ *Id*.

⁹⁷ See also Ctr. for Biological Diversity v. U.S. Army Corps of Engineers, 941 F.3d 1288, 1299 (11th Cir. 2019) ("Regulations cannot contradict their animating statutes or manufacture additional agency power.") (citing FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 125-26 (2000)).

account the adverse effects on landowners who would be affected by the changed route."98

- 46. Further, the Certificate Policy Statement states, "[i]deally, an applicant will structure its proposed project to avoid adverse economic, competitive, environmental, or other effects on the relevant interests from the construction of the new project." And that is what occurred in this case. Columbia's pipeline application shows several route deviations that Columbia adopted during the pre-filing process in response to landowner requests and to avoid stream crossings and steep slopes. Columbia also reduced construction workspace at six locations on the Ohio Valley Conservation Commission parcel to minimize wetland impacts. In addition, Columbia rerouted the pipeline to avoid the James A. Rhodes Airport as requested by the Federal Aviation Administration.
- 47. In sum, the meaning of "public convenience and necessity" does not support weighing the public need for the project against effects related to the upstream production or downstream use of natural gas.
 - D. NEPA does not authorize the Commission to deny a certificate application based on emissions from the upstream production or downstream use of transported natural gas
- 48. The text of the NGA, and the related subsequent acts by Congress, cannot be revised by NEPA or CEQ regulations to authorize the Commission to deny a certificate application based on effects from the upstream production and downstream use of natural gas.
- 49. The courts have made clear that NEPA does not expand a federal agency's substantive or jurisdictional powers. Nor does NEPA repeal by implication any other

⁹⁸ Certificate Policy Statement, 88 FERC at 61,749.

⁹⁹ *Id.* at 61,747.

¹⁰⁰ Columbia March 26, 2018 Application at Table 10.5-15.

¹⁰¹ EA at C-48.

¹⁰² *Id.* at B-141

¹⁰³ Nat. Res. Def. Council, Inc. v. EPA, 822 F.2d 104, 129 (D.C. Cir. 1987) ("NEPA, as a procedural device, does not work a broadening of the agency's substantive powers. Whatever action the agency chooses to take must, of course, be within its

- statute.¹⁰⁴ Rather, NEPA is a merely procedural statute that requires federal agencies to take a "hard look" at the environmental effects of a proposed action before acting on it.¹⁰⁵ NEPA also does not require a particular result. In fact, the Supreme Court has stated, even if a NEPA analysis identifies an environmental harm, the agency can still approve the project.¹⁰⁶
- 50. Further, CEQ's regulations on indirect effects cannot make the GHG emissions from upstream production or downstream use part of the Commission's public convenience and necessity determination under the NGA. As stated above, an agency's obligation under NEPA to consider indirect environmental effects is not limitless. Indirect effects must have "a reasonably close causal relationship" with the alleged cause, and that relationship is dependent on the "underlying policies or legislative intent." NEPA requires such reasonably close causal relationship because "inherent in NEPA and its implementing regulations is a 'rule of reason," which "recognizes that it is pointless to require agencies to consider information they have no power to act on, or effects they have no power to prevent." Thus, "where an agency has no ability to

province in the first instance.") (citations omitted); Cape May Greene, Inc. v. Warren, 698 F.2d 179, 188 (3d Cir. 1986) ("The National Environmental Policy Act does not expand the jurisdiction of an agency beyond that set forth in its organic statute."); Gage v. U.S. Atomic Energy Comm'n, 479 F.2d 1214, 1220 n.19 (D.C. Cir. 1973) ("NEPA does not mandate action which goes beyond the agency's organic jurisdiction."); see also Flint Ridge Dev. Co. v. Scenic Rivers Ass'n of Okla., 426 U.S. 776, 788 (1976) ("where a clear and unavoidable conflict in statutory authority exists, NEPA must give way").

¹⁰⁴ U.S. v. Students Challenging Regulatory Agency Procedures, 412 U.S. 669, 694 (1973).

¹⁰⁵ Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc., 435 U.S. 519, 558 (1978) ("NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.").

¹⁰⁶ Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) ("Although these procedures are almost certain to affect the agency's substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.").

¹⁰⁷ Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774 n.7 (1983).

¹⁰⁸ Pub. Citizen, 541 U.S. at 767;

¹⁰⁹ Ctr. for Biological Diversity, 941 F.3d at 1297; see also Town of Barnstable v.

prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant 'cause' of the effect." ¹¹⁰

51. The Commission has no power to deny a certificate for effects related to the upstream production or downstream use of natural gas. As explained above, the Commission's consideration of adverse environmental effects is limited to those effects stemming from the construction and operation of the pipeline facility and the related right-of-way. For the Commission to deny a pipeline based on GHGs emitted from the upstream production or downstream use of natural gas would be contrary to the text of the NGA and subsequent acts by Congress. The NGA reserves such considerations for the States, and the Commission must respect the jurisdictional boundaries set by Congress. Suggesting that the Commission can consider such effects not only defies Congress, but risks duplicative regulation.

III. The NGA does not contemplate the Commission establishing mitigation for GHG emissions from pipelines

52. My colleague also suggests that the Commission should require the mitigation of GHG emissions from the certificated pipeline facilities and the upstream production and downstream use of natural gas transported by those facilities. I understand his suggestions as proposing a carbon emissions fee, offsets or tax (similar to the Corps' compensatory wetland mitigation program), technology requirements (such as scrubbers or electric-powered compressor units),¹¹¹ or emission caps. Some argue that the Commission can require such mitigation under NGA section 7(e), which provides "[t]he

FAA, 740 F.3d 681, 691 (D.C. Cir. 2014) ("NEPA's 'rule of reason' does not require the FAA to prepare EIS when it would 'serve no purpose."").

("Because the FAA 'simply lacks the power to act on whatever information might be contained in the [environmental impact statement ('EIS')],' NEPA does not apply to its no hazard determinations.") (internal citation omitted); *Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177, 196-97 (4th Cir. 2009) (finding that the U.S. Army Corps of Engineers (Corps) was not required to consider the valley fill projects because "[West Virginia Department of Environmental Protection], and not the Corps, [had] 'control and responsibility' over all aspects of the valley fill projects beyond the filling of jurisdictional waters.").

¹¹¹ It is also important to consider the impact on reliability that would result from requiring electric-compressor units on a gas pipeline. In the event of a power outage, a pipeline with electric-compressor units may be unable to compress and transport gas to end-users, including power plants and residences for heating and cooking.

Commission shall have the power to attach to the issuance of the certificate . . . such reasonable terms and conditions as the public convenience and necessity may require."¹¹²

- 53. I disagree. The Commission cannot interpret NGA section 7(e) to allow the Commission to unilaterally establish measures to mitigate GHG emissions because Congress, through the Clean Air Act, assigned the EPA and the States exclusive authority to establish such measures. Congress designated the EPA as the expert agency "best suited to serve as primary regulator of greenhouse gas emissions," ¹¹³ not the Commission.
- 54. The Clean Air Act establishes an all-encompassing regulatory program, supervised by the EPA to deal comprehensively with interstate air pollution. 114 Congress entrusted the Administrator of the EPA with significant discretion to determine appropriate emissions measures. Congress delegated the Administrator the authority to determine whether pipelines and other stationary sources endanger public health and welfare; section 111 of the Clean Air Act directs the Administrator of the EPA "to publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in *his judgment* it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" and to establish standards of performance for the identified stationary sources. The Clean Air Act requires the Administrator to conduct complex balancing when determining a standard of performance, taking into consideration what is technologically achievable and the cost to achieve that standard. 117
- 55. In addition, the Clean Air Act allows the Administrator to "distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards." The Act also permits the Administrator, with the consent of the Governor of the State in which the source is to be located, to waive its requirements "to

¹¹² 15 U.S.C. § 717f(e) (2018).

¹¹³ American Elec. Power Co., Inc. v. Conn., 564 U.S. 410, 428 (2011).

¹¹⁴ See id. at 419.

¹¹⁵ 42 U.S.C. § 7411(b)(1)(A) (2018) (emphasis added).

¹¹⁶ *Id.* § 7411(b)(1)(B).

¹¹⁷ *Id.* § 7411(a)(1).

¹¹⁸ *Id.* § 7411(a)(2).

encourage the use of an innovative technological system or systems of continuous emission reduction."¹¹⁹

- 56. Congress also intended that states would have a role in establishing measures to mitigate emissions from stationary sources. Section 111(f) notes that "[b]efore promulgating any regulations . . . or listing any category of major stationary sources . . . the Administrator shall consult with appropriate representatives of the Governors and of State air pollution control agencies." ¹²⁰
- 57. Thus, the text of the Clean Air Act demonstrates it is improbable that NGA section 7(e) allows the Commission to establish GHG emission standards or mitigation measures out of whole cloth. To argue otherwise would defeat the significant discretion and complex balancing that the Clean Air Act entrusts in the EPA Administrator, and would eliminate the role of the States.
- 58. Furthermore, to argue that the Commission may use its NGA conditioning authority to establish GHG emission mitigation—a field in which the Commission has no expertise—and address climate change—an issue that has been subject to profound debate across our nation for decades—is an extraordinary leap. The Supreme Court's "major rules" canon advises that agency rules on issues that have vast economic and political significance must be treated "with a measure of skepticism" and require Congress to provide clear authorization. The Court has articulated this canon because Congress does not "hide elephants in mouseholes" and "Congress is more likely to have focused upon, and answered, major questions, while leaving interstitial matters to answer themselves in the course of the statute's daily administration." ¹²³

¹¹⁹ *Id.* § 7411(j)(1)(A).

¹²⁰ *Id.* § 7411(f)(3).

¹²¹ Util. Air Regulatory Grp. v. EPA, 573 U.S. 302, 324 (2014); Brown & Williamson, 529 U.S. at 160 ("Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion."); see also Gonzales v. Oregon, 546 U.S. 243, 267-68 (2006) (finding regulation regarding issue of profound debate suspect).

¹²² Whitman v. American Trucking Ass., 531 U.S. 457, 468 (2001).

¹²³ FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 12, 159 (quoting Justice Breyer, Judicial Review of Questions of Law and Policy, 38 ADMIN. L. REV. 363, 370 (1986)); see also Abbe R. Gluck & Lisa Schultz Bressman, Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons:

- 59. Courts would undoubtedly treat with skepticism any attempt by the Commission to mitigate GHG emissions. Congress has introduced climate change bills since at least 1977, ¹²⁴ over four decades ago. Over the last 15 years, Congress has introduced and failed to pass 70 legislative bills to reduce GHG emissions—29 of those were carbon emission fees or taxes. ¹²⁵ For the Commission to suddenly declare such climate mitigation power resides in the long-extant NGA and that Congress's efforts were superfluous strains credibility. Requiring pipelines to pay a carbon emissions fee or tax, or to invest in GHG mitigation would be a major rule, and Congress has made no indication that the Commission has such authority.
- 60. Some may make the argument that the Commission can require mitigation without establishing a standard. I disagree. Establishing mitigation measures requires determining how much mitigation is required i.e., setting a limit, or establishing a standard, that quantifies the amount of GHG emissions that will adversely affect the human environment. Some may also argue that the Commission has unilaterally established mitigation in other contexts, including wetlands, soil conservation, and noise. These examples, however, are distinguishable. Congress did not exclusively assign the authority to establish avoidance or restoration measures for mitigating effects on wetlands or soil to a specific agency. The Corps and the EPA developed a wetlands mitigation bank program pursuant to section 404 of the Clean Water Act. Congress endorsed such mitigation. As for noise, the Clean Air Act assigns the EPA

PART I, 65 STAN. L. REV. 901, 1004 (2013) ("Major policy questions, major economic questions, major political questions, preemption questions are all the same. Drafters don't intend to leave them unresolved.")

¹²⁴ National Climate Program Act, S. 1980, 95th Cong. (1977).

¹²⁵ CONGRESSIONAL RESEARCH SERVICE, MARKET-BASED GREENHOUSE GAS EMISSION REDUCTION LEGISLATION: 108TH THROUGH 116TH CONGRESSES at 3 (Oct. 23, 2019), https://fas.org/sgp/crs/misc/R45472.pdf. Likewise, the CEQ issued guidance on the consideration of GHG emissions in 2010, 2014, 2016, and 2019. None of those documents require, let alone recommend, that an agency establish a carbon emissions fee or tax.

¹²⁶ 33 U.S.C. § 1344 (2018).

¹²⁷ See Water Resources Development Act, Pub. L. 110-114, § 2036(c), 121 Stat. 1041, 1094 (2007); National Defense Authorization Act, Pub. L. 108-136, § 314, 117 Stat. 1392, 1430 (2004); Transportation Equity Act for the 21st Century, Pub. L. 105-178, § 103 (b)(6)(M), 112 Stat. 107, 133 (1998); Water Resources Development Act of 1990, Pub. L. 101-640, § (a)(18)(C), 104 Stat. 4604, 4609 (1990).

Administrator authority over determining the level of noise that amounts to a public nuisance and requires federal agencies to consult with the EPA when its actions exceed the public nuisance standard. The Commission complies with the Clean Air Act by requiring project noise levels in certain areas to not exceed 55 dBA Ldn, as required by EPA's guidelines. 129

61. Accordingly, there is no support that the Commission can use its NGA section 7(e) authority to establish measures to mitigate GHG emissions from proposed pipeline facilities or from the upstream production or downstream use of natural gas. ¹³⁰

IV. The Commission has no reliable objective standard for determining whether GHG emissions significantly affect the environment

62. My colleague argues that the Commission violates the NGA and NEPA by not determining the significance of GHG emissions that are effects of a project. ¹³¹ He challenges the Commission's explanation that it cannot determine significance because there is no standard for determining the significance of GHG emissions. ¹³² He argues that the Commission can adopt the Social Cost of Carbon ¹³³ to determine whether GHG emissions are significant or rely on its own expertise as it does for other environmental

¹²⁸ 42 U.S.C. § 7641(c) ("In any case where any Federal department or agency is carrying out or sponsoring any activity resulting in noise which the Administrator determines amounts to a public nuisance or is otherwise objectionable, such department or agency shall consult with the Administrator to determine possible means of abating such noise.").

 $^{^{129}}$ See Williams Gas Pipelines Cent., Inc., 93 FERC \P 61,159, at 61,531-52 (2000).

¹³⁰ In addition, requiring a pipeline to mitigate emissions from the upstream production or downstream use of natural gas would not be "a reasonable term or condition as the public convenience and necessity may require." 15 U.S.C. § 717f(e) (2018). It would be unreasonable to require a pipeline to mitigate an effect it has no control over. Further, as discussed above, emissions from the upstream production and downstream use of natural gas are not relevant to the NGA's public convenience and necessity determination.

¹³¹ Dissent PP 2, 5-6 13.

¹³² *Id.* P 14.

¹³³ *Id*.

resources, such as vegetation, wildlife, or visual resources, including scenic byways. ¹³⁴ He suggests that the Commission does not make a finding of significance in order to deceptively find that a project is in the public convenience and necessity. ¹³⁵

63. I disagree. The Social Cost of Carbon is not a suitable method for determining whether GHG emissions that are caused by a proposed project will have a significant effect on climate change and the Commission has no authority or objective basis using its own expertise to make such determination.

A. Social Cost of Carbon is not a suitable method to determine significance

- 64. The Commission has found, and I agree, that the Social Cost of Carbon is not a suitable method for the Commission to determine significance of GHG emissions. ¹³⁶ Because the courts have repeatedly upheld the Commission's reasoning, ¹³⁷ I will not restate the Commission's reasoning here.
- 65. However, I will address the suggestion that the Social Cost of Carbon can translate a project's impact on climate change into "concrete and comprehensible terms" that will

¹³⁴ *Id.* P 15.

¹³⁵ *Id.* P 5. The dissent uses the phrase "public interest"; however, as noted earlier, the Commission issues certificates when required by the public convenience and necessity. NGA section 7(e) does not include the phrase "public interest." To the extent that the courts and the Commission have equated the "public convenience and necessity" with "public interest," the "public convenience and necessity" is not as broad as some would argue. *See supra* P 15.

¹³⁶ Fla. Se. Connection, LLC, 162 FERC ¶ 61,233, at P 48 (2018).

F.3d 949, 956 (D.C. Cir. 2016); Sierra Club v. FERC, 672 F. App'x 38, (D.C. Cir. 2016); see also Citizens for a Healthy Cmty. v. U.S. Bureau of Land Mgmt., 377 F. Supp. 3d 1223, 1239-41 (D. Colo. 2019) (upholding the agency's decision to not use the Social Cost of Carbon); WildEarth Guardians v. Zinke, 368 F. Supp. 3d 41, 77-79 (D.D.C. 2019) (upholding the agency's decision to not use the Social Cost of Carbon); High Country Conservation Advocates v. U.S. Forest Serv., 333 F. Supp. 3d 1107, 1132 (D. Colo. 2018) ("[T]he High Country decision did not mandate that the Agencies apply the social cost of carbon protocol in their decisions; the court merely found arbitrary the Agencies' failure to do so without explanation.").

help inform agency decision-makers and the public at large. The Social Cost of Carbon, described as an estimate of "the monetized damages associated with an incremental increase in carbon emissions in a given year," may appear straightforward. On closer inspection, however, the Social Cost of Carbon and its calculated outputs are not so simple to interpret or evaluate. When the Social Cost of Carbon estimates that one metric ton of CO₂ costs \$12 (the 2020 cost for a discount rate of 5 percent), agency decision-makers and the public have no objective basis or benchmark to determine whether that cost is significant. Bare numbers standing alone simply *cannot* ascribe significance.

B. The Commission has no authority or objective basis to establish its own framework

66. Some argue that the lack of externally established targets does not relieve the Commission from establishing a framework or targets on its own. Some have suggested that the Commission can make up its own framework, citing the Commission's framework for determining return on equity (ROE) as an example. However, they overlook the fact that Congress designated the EPA, not the Commission, with exclusive authority to determine the amount of emissions that are harmful to the environment. In

¹³⁸ Dissent P 14.

¹³⁹ Interagency Working Group on the Social Cost of Greenhouse Gases, Technical Support Document – Technical Update of the Social Cost of Carbon for Regulatory impact Analysis – Under Executive Order 12866 at 1 (Aug. 2016), https://www.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf (2016 Technical Support Document).

¹⁴⁰ In fact, the website for the Climate Framework for Uncertainty Negotiation and Distribution (FUND) – one of the three integrated assessment models that the Social Cost of Carbon uses – states "[m]odels are often quite useless in unexperienced hands, and sometimes misleading. No one is smart enough to master in a short period what took someone else years to develop. Not-understood models are irrelevant, half-understood models are treacherous, and mis-understood models dangerous." FUND-Climate Framework for Uncertainty, Negotiation and Distribution, http://www.fund-model.org/ (LAST VISITED Nov. 18, 2019).

¹⁴¹ See 2016 Technical Support Document at 4. The Social Cost of Carbon produces wide-ranging dollar values based upon a chosen discount rate, and the assumptions made. The Interagency Working Group on Social Cost of Greenhouse Gases estimated in 2016 that the Social Cost of one ton of carbon dioxide for the year 2020 ranged from \$12 to \$123. *Id.*

addition, there are no available resources or agency expertise upon which the Commission could reasonably base a framework or target.

- 67. As I explain above, Congress enacted the Clean Air Act to establish an all-encompassing regulatory program, supervised by the EPA to deal comprehensively with interstate air pollution. Section 111 of the Clean Air Act directs the Administrator of the EPA to identify stationary sources that "in his judgment cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" and to establish standards of performance for the identified stationary sources. Thus, the EPA has exclusive authority for determining whether emissions from pipeline facilities will have a significant effect on the environment.
- 68. Further, the Commission is not positioned to unilaterally establish a standard for determining whether GHG emissions will significantly affect the environment when there is neither federal guidance nor an accepted scientific consensus on these matters. This inability to find an acceptable methodology is not for a lack of trying. The Commission reviews the climate science, state and national targets, and climate models that could inform its decision-making. 145
- 69. Moreover, assessing the significance of project effects on climate change is unlike the Commission's determination of ROE. Establishing ROE has been one of the core

¹⁴² 42 U.S.C. § 7411(b)(1)(A) (2018).

¹⁴³ *Id.* § 7411(b)(1)(B).

¹⁴⁴ The Council on Environmental Quality's 2019 Draft Greenhouse Gas Guidance states, "[a]gencies need not undertake new research or analysis of potential climate effects and may rely on available information and relevant scientific literature." CEQ, Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions, 84 Fed. Reg. 30,097, 30,098 (June 26, 2019); see also CEQ FINAL GUIDANCE FOR FEDERAL DEPARTMENTS AND AGENCIES ON CONSIDERATION OF GREENHOUSE GAS EMISSIONS AND THE EFFECTS OF CLIMATE CHANGE IN NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS at 22 (Aug. 1, 2016) ("agencies need not undertake new research or analysis of potential climate change impacts in the proposed action area, but may instead summarize and incorporate by reference the relevant scientific literature"), https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf.

 $^{^{145}}$ Fla. Se. Connection, LLC, 162 FERC ¶ 61,233, at P 36; see also WildEarth Guardians, 738 F.3d 298, 309 (D.C. Cir. 2013) ("Because current science does not allow for the specificity demanded by the Appellants, the BLM was not required to identify specific effects on the climate in order to prepare an adequate EIS.").

functions of the Commission since its inception under the FPA as the Federal Power Commission. And, setting ROE has been an activity of state public utility commissions, even before the creation of the Federal Power Commission. The Commission's methodology is also founded in established economic theory. In contrast, assessing the significance of GHG emissions is not one of the Commission's core missions and there is no suitable methodology for making such determination.

- 70. It has been argued that the Commission can establish its own methodology for determining significance, pointing out that the Commission has determined the significance of effects on vegetation, wildlife, and open land using its own expertise and without generally accepted significance criteria or a standard methodology.
- 71. I disagree. As an initial matter, it is important to note that when the Commission states it has no suitable methodology for determining the significance of GHG emissions, the Commission means that it has no objective basis for making such finding. The Commission's findings regarding significance for vegetation, wildlife, and visual resources have an objective basis. For example for general impacts to vegetation, the Commission determined the existing vegetation types in the project area by referencing the application, as supplemented, and determined the general characterization of the vegetation covers using publicly available resources and databases established by the U.S. Forest Service and the EPA. The Commission determined the Project's effect on vegetation by referencing the application to quantify the total acreage that will be temporarily impacted by project construction and permanently impacted by project operation. In addition, the Commission determined the Project's effect on vegetation by considering Columbia's proposed avoidance, minimization, and mitigation

¹⁴⁶ Hope, 320 U.S. 591 (1944); FPC v. Nat. Gas Pipeline Co. of America, 315 U.S. 575 (1942).

¹⁴⁷ See, e.g., Willcox v. Consol. Gas Co., 212 U.S. 19, 41 (1909) (finding New York State must provide "a fair return upon the reasonable value of the property at the time it is being used for the public.").

¹⁴⁸ Inquiry Regarding the Commission's Policy for Determining Return on Equity, 166 FERC \P 61,207 (2019) (describing the Commission's use of the Discounted Cash Flow model that was originally developed in the 1950s as a method for investors to estimate the value of securities).

¹⁴⁹ EA at B-75.

 $^{^{150}}$ *Id.* at B-78 – B-84.

- measures. ¹⁵¹ Based on this information, the Commission made a reasoned finding that the Project's effect on vegetation will not be significant. The Commission conducted a similar evaluation of wildlife and visual resources.
- 72. In contrast, the Commission has no reasoned basis to determine whether a project has a significant effect on climate change. To assess a project's effect on climate change, the Commission can only quantify the amount of project emissions. That calculated number cannot inform the Commission on climate change effects caused by the project, e.g., increase of sea level rise, effect on weather patterns, or effect on ocean acidification. Nor are there acceptable scientific models that the Commission may use to attribute every ton of GHG emissions to a physical climate change effect.
- 73. Without adequate support or a reasoned target, the Commission cannot ascribe significance to particular amounts of GHG emissions. To do so would not only exceed our agency's authority, but would risk reversal upon judicial review. Courts require agencies to "consider[] the relevant factors and articulate[] a rational connection between the facts found and the choice made." Simply put, stating that an amount of GHG emissions appears significant without any objective support fails to meet the agency's obligations under the Administrative Procedure Act (APA).

V. Conclusion

74. This concurrence is intended to assist the Commission, courts, and other parties in their consideration of the Commission's obligations under the NGA and NEPA. The Commission cannot act *ultra vires* and claim more authority than the NGA provides it, regardless of the importance of the issue sought to be addressed. The NGA provides the Commission no authority to deny a certificate application based on the environmental

¹⁵¹ *Id.* at B-90.

¹⁵² City of Tacoma v. FERC, 460 F.3d 53, 76 (D.C Cir. 2006) (quoting Ariz. Cattle Growers' Ass'n v. FWS, 273 F.3d 1229, 1235-36 (9th Cir. 2001)); see also American Rivers v. FERC, 895 F.3d 32, 51 (D.C. Cir. 2018) ("... the Commission's NEPA analysis was woefully light on reliable data and reasoned analysis and heavy on unsubstantiated inferences and non sequiturs") (italics in original); Found. for N. Am. Wild Sheep v. U.S. Dep't of Agr., 681 F.2d 1172, 1179 (9th Cir. 1982) ("The EA provides no foundation for the inference that a valid comparison may be drawn between the sheep's reaction to hikers and their reaction to large, noisy ten-wheel ore trucks.").

¹⁵³ Office of Consumers' Counsel, 655 F.2d at 1152 ("[A]ppropriate respect for legislative authority requires regulatory agencies to refrain from the temptation to stretch their jurisdiction to decide questions of competing public priorities whose resolution properly lies with Congress.").

effects from the upstream production or downstream use of natural gas. Congress enacted the NGA, and subsequent legislation, to ensure the Commission provided public access to natural gas. Further, Congress designed the NGA to preserve States' authority to regulate the physical effects from the upstream production and downstream use of natural gas, and did not leave that field unregulated. Congress simply did not authorize the Commission to judge whether the upstream production or downstream use of gas will be too environmentally harmful.

- 75. Nor does the Commission have the ability to establish measures to mitigate GHG emissions. Pursuant to the Clean Air Act, Congress exclusively assigned authority to regulate emissions to the EPA and the States. Finally, the Commission has no objective basis for determining whether GHG emissions are significant that would satisfy the Commission's APA obligations and survive judicial review.
- 76. I recognize that some believe the Commission should do more to address climate change. The Commission, an energy agency with a limited statutory authority, is not the appropriate authority to establish a new regulatory regime.

For these reasons, I respectfully concur.

Bernard L. McNamee

Commissioner