



ATLANTIC COAST PIPELINE, LLC ATLANTIC COAST PIPELINE

STATEMENT OF JUSTIFICATION FOR FLOODPLAIN CROSSINGS NELSON COUNTY, VIRGINIA

Submitted, October, 2017

I. Introduction

Atlantic Coast Pipeline, LLC (Atlantic) is proposing a 603.4-mile natural gas pipeline referred to as the Atlantic Coast Pipeline (ACP or Project) as part of the plan to provide safe, dependable natural gas service for current and future customers in West Virginia, Virginia and North Carolina. Approval of a variance from Nelson County is needed for construction in the floodway of a 42-inch diameter underground natural gas pipeline within a 50 foot-wide permanent right-of-way and access roads that are proposed to cross approximately 4.5 miles (3.5 miles of pipeline, 1 mile of access roads) of Federal Emergency Management Agency (FEMA) designated floodplains within Nelson County.

II. Requirements for the Proposed Use

Why the new facility is needed:

The ACP is a proposed interstate natural gas transmission system that will serve the growing energy needs in the Mid-Atlantic including West Virginia, Virginia and North Carolina. Based on current customer commitments, approximately 76 percent of the natural gas transported by the ACP will be used as a fuel to generate electricity for industrial, commercial, and residential uses. The remainder of the natural gas will be used directly for residential, industrial, and commercial and other uses such as vehicle fuel. By providing access to low-cost natural gas supplies, the ACP will increase the reliability and security of natural gas supplies in West Virginia, Virginia and North Carolina, and thereby meet expected demand for natural gas-powered electric generation in those states.

By 2035, natural gas is expected to surpass coal as the most common fuel for electric power generation due to coal-fired plant retirements and low natural gas prices. The U.S. Energy Information Administration (2015) expects renewable generation to grow 2 percent per year from 2013-2040, meeting a part of the demand for power, but more than 60 percent of new generating capacity needed from 2025 to 2040 will be fueled by natural gas.

A study prepared by ICF International (2015) for Atlantic projects that electric power generation in Virginia and North Carolina will increasingly rely on natural gas over the next two decades. Between 2019 and 2038, the study predicts that approximately 9,900 megawatts of electric generating capacity will be retired, while 20,200 megawatts of new generating capacity from natural gas will be built in Virginia and

North Carolina. As a result, demand for natural gas for power generation in Virginia and North Carolina is expected to grow 6.3 percent annually between 2014 and 2035, increasing from 1 to 3.7 billion cubic feet per day (bcf/d).¹

In April 2014, Duke Energy and Piedmont issued a request for proposal for incremental pipeline transportation service due to their existing and future natural gas generation requirements, core load growth, and system reliability and supply diversity goals. Specifically, the request for proposal issued by Duke Energy and Piedmont stated that the new infrastructure requested as part of the proposal would support their anticipated needs for natural gas supply and transportation services. Duke Energy's growing reliance on natural gas to meet the State of North Carolina's and Duke Energy's electric generation needs coupled with Piedmont's core load growth and operational requirements supports an investment in new natural gas infrastructure as proposed by Atlantic.

In June 2014, Virginia Power Services Energy Corp., Inc. issued a request for proposal for firm transportation service to serve Virginia. In particular, the request for proposal identified a need for additional firm, interstate pipeline capacity to deliver natural gas supplies to various points in the Commonwealth of Virginia. Following the request for proposal processes, Duke Energy, Piedmont, and Virginia Power Services Energy Corp., Inc. each contracted for transportation service on the ACP as did other companies in the region.

The ACP will provide up to 1.5 MMDth/d of firm natural gas transportation service into West Virginia, Virginia, and North Carolina. Of the 1.5 MMDth/day of the firm transportation capacity created by the ACP, Atlantic currently has commitments with six customers for 1.44 MMDth/d (96 percent). The precedent agreements between Atlantic and these six customers demonstrate the demand for new natural gas supplies, the desire for access to a new supply region, and the need for the ACP. The remaining unsubscribed capacity on the ACP (4 percent) will be awarded and contracted in accordance with Federal Energy Regulatory Commission (FERC) policies applicable to open-access interstate pipelines and the provisions of applicable natural gas tariffs.

ACP Routing Approval:

On October 13, 2017, Atlantic received a Certificate of Public Convenience and Necessity (Certificate) from the FERC under Section 7(c) of the Natural Gas Act (NGA) to construct, own, operate, and maintain the proposed facilities for the ACP system. FERC issues Certificates for construction and operation of pipelines engaged in interstate natural gas transportation where public need has been demonstrated and a comprehensive review of the environmental impacts has been completed pursuant to the National Environmental Policy Act (NEPA). This provides that alternatives have been evaluated and the alternative with the least environmental impact that can meet the need has been selected.

The FERC licensing process included a NEPA evaluation of multiple alternatives to the proposed route. A proposed route for the ACP across Nelson County was preliminarily selected by the FERC pursuant to the Final Environmental Impact Statement (FEIS) issued July 21, 2017. On October 13, 2017 Atlantic received its Certificate from FERC.

Project construction in Nelson County is scheduled for November 2018 through November 2019. After construction is complete, the original topographic conditions and contours will be restored. In addition, temporary access roads will be returned to their pre-existing conditions or to conditions in accordance with landowner agreements.

¹ One bcf/d is approximately equivalent to 1 MMDth/d.

III. Conformance with County Ordinance requirements

Article 10 [General Floodplain District FP] of the Nelson County Zoning Ordinance regulates development within floodplains. Pursuant to Article 10, Section 21, Atlantic is requesting a variance for development of the Project in the Floodway District.

In accordance with Article 10, Section 13.A, Atlantic will construct the Project in strict compliance with all other applicable federal, state and local requirements, including the Virginia Uniform Statewide Building Code. As demonstrated by the No Rise Certificates at Attachment 2, the Project will not adversely affect the capacity of channels of the floodway or any watercourse, drainage ditch, or any other drainage system.

Pursuant to Article 10, Section 13.C (1), (4), (5), (7) and (8), Atlantic has included with this Application three copies of a scale drawing showing the location of the proposed pipeline and No-Rise certificates for each of the floodplain crossings. The plans and No-Rise certificates show, among other things: i) topography, elevations or contours of the ground and 100-year flood, ii) pertinent structure, fill, and storage of all proposed and existing structures on the site, iii) location and elevations of streets, water supply, and sanitary facilities, as applicable. Atlantic has also provided photographs showing existing land uses and vegetation upstream and downstream, soil types, and other pertinent information.²

As required by Article 10, Section 14 of the Ordinance, Atlantic will construct the pipeline in accordance with all applicable General Standards. In particular, as required by Article 10, Sections 14(A), (C) and (D), the 42-inch pipeline will be installed at least five feet below the stream channel so that additional anchoring will not be needed, and will be constructed of high strength steel with a fusion bonded epoxy coating which are materials resistant to damage from ground saturation.³

Atlantic also will comply with specific district and design criteria. With regard to Article 10, Section 16, for any portion of the Project located in an area designated as a Floodway District, as required by 44 CFR Section 60.3(d)(3), the project will not result in any increase in flood levels within the County during the occurrence of the base flood discharges as the pipeline will be constructed underground and there will be no increase in existing grade as reflected in the No-Rise certificates attached as Attachment 2.⁴ The Project will be constructed in conformance with all standards applicable within other designated zones (e.g., Special Floodplain Districts and/or Approximated Floodplains) impacted by the Project. As required by Article 10, Section 20, and as may otherwise be applicable, ACP will be located and constructed to minimize the chance of impairment during a flooding occurrence.

As evidenced by the information and documentation provided in the Application, Atlantic's requested-variance satisfies the permitting standards set forth in Article 10, Section 21 of the Zoning Ordinance. Specifically, Atlantic has shown good and sufficient cause for the construction of the Project (see Part II above). Given that the pipeline will be underground, the granting of a variance would not cause (1) unacceptable or prohibited increases in flood heights; (2) any threats to public safety; (3) extraordinary public expense; (4) any nuisance; (5) any fraud or victimization of the public, and (6) will not conflict with

² With regard to Article 10, Section 13.C (2) and (3), as Atlantic is not planning elevated structures in the floodplain or which will require floodproofing, these application requirements should not apply. Nor is Article 10, Section 13.B applicable because the Project will not involve alteration or relocation of a watercourse.

³ The remaining standards set forth in this section relate to manufactured homes or service systems, or where channels or watercourses will be altered or fences built. This Project includes none of these activities and therefore the remainder of the requirements of Article 10, Section 14 do not apply.

⁴ The requirements for Specific Standards as set forth Article 10, Section 15 relate to Residential Construction, Non-Residential Construction (involving structures), Elevated Buildings, and Manufactured Homes and are not applicable to this application. Nor is Article 10, Section 13.B, pertaining to existing structures, applicable.

local laws or ordinances. The granting of a variance will be the minimum required to provide relief from extraordinary hardship to Atlantic, given the substantial need for the Project (as described above), and the minimal disturbance to the Floodway.

With regard to the specific criteria for a variance set forth in Article 10, Section 21 of the Ordinance, Atlantic's request for a variance satisfies all of the relevant factors included in that section for the following reasons:

- A. The danger to life and property due to increased flood heights or velocities caused by encroachments. No Variance shall be granted for any proposed use, development, or activity within any floodway district that will cause any increase in the Base Flood Elevation (BFE).

The proposed Project will not endanger life or property and will not increase flood heights, velocities or Base Flood Elevation. Please see the attached No-Rise certificates.

- B. The danger that materials may be swept on to other lands or downstream to the injury of others.

As mentioned above, the pipeline will be anchored by its construction at least five feet below the stream channel. There is minimal to no danger that materials could be swept on other land to the injury of others.

- C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

The Project will not adversely affect water supply or sanitation systems.

- D. The susceptibility of the proposed facility and its contents to flood damage and effect of such damage on the individual owners.

As the pipeline will be constructed underground and designed as set forth herein, it will not be susceptible to flood damage or impact individual owners.

- E. The importance of the services provided by the proposed facility to the community.

Please see Section II – Why the new facility is needed – above.

- F. The requirements of the facility for a waterfront location.

Please see Section II – ACP Routing Approval – above.

- G. The availability of alternative locations not subject to flooding for the proposed use.

Please see Section II – ACP Routing Approval – above.

- H. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

The underground pipeline will not adversely affect existing or future development.

- I. The relationship of the proposed use to the Comprehensive Plan and floodplain management program for the area.

The construction of the pipeline underground is consistent with the overarching goals of the Comprehensive Plan's to maintain the rural character of Nelson County and protecting productive agricultural and forestal land.

- J. The safety of access by ordinary and emergency vehicles to the property in time of flood.

As the Project will be constructed at least five feet below the stream channel, it should not require access by emergency vehicles in time of flood. If such access is required, Atlantic's proposed roads will provide safe access.

- K. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site.

Please see the attached No-Rise certificates.

- L. The repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

The Project does not require the repair or rehabilitation of historic structures.

For the approximately 4.5 miles of floodplain crossing in Nelson County, Atlantic has prepared No-Rise certificates, which state that the proposed 42-inch diameter pipeline and access roads proposed as part of the Atlantic Coast Pipeline will not impact flood elevations, floodway elevations and floodway widths in Nelson County. These No-Rise certificates have been sealed by professional engineers licensed in the Commonwealth of Virginia.

In considering the need for the project and the details as provided in the No-Rise certificates, Atlantic's proposed development meets all applicable requirements set forth in Article 10 of the Ordinance. Further, the Project will have little to no impact on the floodplain district and will not negatively impact public health, safety, or welfare of persons in the area.

IV. Conclusion

The above-described statement of justification proposes a necessary public utility facility that meets the standards for approval. With approval of the requested variance application, the proposal will conform to the provisions of all applicable ordinances, regulations, standards, and conditions. For the reasons set forth herein, Atlantic respectfully requests the approval of this Floodplain Permit application.

