DOCKET NO. D-2015-020-1

DELAWARE RIVER BASIN COMMISSION

Eastern Shore Natural Gas Company
White Oak Mainline Expansion Project

Natural Gas Pipeline
Highland, Londonderry and Franklin Townships, Chester County, Pennsylvania and New Castle County, Delaware

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) by Eastern Shore Natural Gas Company ("Eastern Shore" or "docket holder") on October 28, 2015 ("the Application"), for the approval of a natural gas pipeline project referred to as the "White Oak Mainline Expansion Project ("Project")." The Kemblesville Alternative 2 Loop crosses two designated tributaries of the White Clay Creek National Wild and Scenic River, which is a recreation project area designated in the Commission's Comprehensive Plan. The Project therefore meets a regulatory threshold that subjects the Project to Commission review. Eastern Shore submitted an Abbreviated Application for Certificate of Public Convenience and Necessity to the Federal Energy Regulatory Commission ("FERC") on November 21, 2014 under Docket No. CP15-18-000 and amended its application under Docket No. CP15-18-001 to adopt the Kemblesville Alternative 2 Route on November 18, 2015. FERC is reviewing the application and preparing an Environmental Assessment. Additional federal, state and county regulatory approvals pending include: a Department of the Army permit pursuant to Section 404 of the Clean Water Act from the United States Army Corps of Engineers ("USACE"), a Section 401 Water Quality Certification and a Chapter 105, Water Obstruction and Encroachment Permit from the Pennsylvania Department of Environmental Protection (PADEP); Pennsylvania Erosion and Sediment Control General Permits from the PADEP, covering construction and post-construction activities in Chester County, Pennsylvania; and NPDES General Stormwater Permit, Coastal Zone Management Act Permit and Erosion and Sediment Control Plan approval from DNREC and New Castle County Land Use Department for construction activities relating to the Compressor Station expansion in New Castle County, Delaware.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Chester County Planning Commission and the New Castle County Planning Department have been notified of pending action on this docket. A public hearing on this project was held by the DRBC on February 10, 2016.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to approve the construction of the Delaware River Basin portion of the docket holder's White Oak Mainline Expansion Project, including: two loops

of 16-inch diameter natural gas pipeline in Chester County, Pennsylvania and the expansion of the docket holder's existing Delaware City Compressor Station in New Castle County, Delaware. The Project is necessary to provide 45,000 dekatherms per day ("Dth/d") of Off Peak ≤90 Firm Transportation (OPT≤90) service for Calpine Energy Services, L.P. ("CES"), which has executed a binding precedent agreement obligating it to execute a long-term service agreement with Eastern Shore for such service. CES will use the incremental capacity to deliver natural gas fuel to the Garrison Energy Center, a 309-megawatt ("MW") state-of-the art, combined cycle power plant. The docket also constitutes a special use permit in accordance with Section 6.3.4 of the Commission's Flood Plain Regulations.

2. Location. The White Oak Mainline Expansion Project involves the installation of two loops of 16-inch diameter natural gas pipeline, referred to as the Daleville Loop and Kemblesville Alternative 2 Loop, in Highland, Londonderry and Franklin Townships, Chester County, Pennsylvania. The two natural gas pipeline loops are separated by a distance of approximately 7 miles.

The Daleville Loop begins at Eastern Shore's existing right-of-way ("ROW") along Limestone Road in Highland Township, Chester County, PA and extends 3.3 miles southeast to the existing Eastern Shore Daleville Compressor Station in Londonderry Township, Chester County, PA. The northernmost 2.66 miles of the pipeline route (generally north of Daleville Road) is located in the Delaware River Basin. The remainder of the pipeline route south of Daleville Road (0.64 miles) is located in the drainage area of East Branch Big Elk Creek, which is part of the Chesapeake Bay Watershed. The pipeline route generally parallels or follows the existing Eastern Shore ROW, except in the area of Gap Newport Pike.

The Kemblesville Alternative 2 route begins near the intersection of Hess Mill Road and Wingate Drive and extends 2.1 miles southeast to tie into the existing Eastern Shore pipeline south of Walker Road all in Franklin Township, Chester County, PA. The northernmost 0.81 miles of the pipeline is located in the Delaware River Basin. The remainder of the pipeline (1.29 miles) is located in the drainage area of Big Elk Creek, which is part of the Chesapeake Bay Watershed. The entire pipeline route follows the existing Eastern Shore pipeline ROW.

Eastern Shore will expand the existing Delaware City Compressor Station, which is located northeast of the intersection of Wrangle Road (State Route 72) and School House Road, approximately 0.8 miles east of the intersection of State Route 72 and DuPont Parkway (Route 13) in New Castle County, Delaware by including two new compressor units. The expansion will occupy approximately 7.1 acres of additional land immediately adjacent to the existing station facilities.

The Project pipelines and aboveground facility are located in the Delaware River Basin drainage areas as follows:

DRB WATERSHEDS CROSSED BY THE PROJECT	
PROJECT FEATURE	**HUC 12 WATERSHED**

Daleville Loop (M.P. 0.0 - 2.66)	Doe Run
Kemblesville Alternative 2 Loop (M.P. 0.0 – 0.81)	West Branch White Clay Creek
Delaware City Compressor Station	Dragon Creek-Delaware River

A listing of the individual stream crossings within the Delaware River Basin is included in a table in the Findings section of this docket.

3. Area Served. The Project will result in incremental expansion capacity sufficient to support Eastern Shore's agreement to provide 45,000 Dth/day of firm transportation service to CES under Rate Schedule OPT≤90 of Eastern Shore's FERC Gas Tariff. CES will use this firm transportation service to supply natural gas fuel to the Garrison Energy Center, a 309 MW electric generation facility currently being constructed by CES' affiliate, Garrison Energy Center, LLC ("GEC"). For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. Physical features.

a. Design criteria. In April 2011, GEC and Eastern Shore began discussions regarding GEC's proposal to develop the Garrison Energy Center and its need to secure natural gas transportation services. Those discussions yielded a precedent agreement whereby Eastern Shore agreed to construct the White Oak Lateral, a 5.5-mile 16-inch pipeline connecting the Garrison Energy Center to Eastern Shore's pipeline system, and CES agreed to enter into a long-term service agreement for Delivery Lateral Firm Transportation ("DLFT") service to be provided via the lateral.

On June 13, 2013, Eastern Shore filed an application with the FERC seeking authorization under NGA Section 7(c) to construct, own, operate and maintain the White Oak Lateral. The Commission issued the requested certificate by order dated November 27, 2013. Eastern Shore commenced construction of the White Oak Lateral in early 2014 and received Commission authorization to place the lateral into service on October 1, 2014.

The White Oak Lateral precedent agreement between Eastern Shore and CES only addresses firm transportation service on the White Oak Lateral. It did not provide for any firm transportation service on Eastern Shore's mainline system. After executing the White Oak Lateral precedent agreement, CES and Eastern Shore shifted the focus to securing firm transportation service on Eastern Shore's mainline system to the White Oak Lateral. CES and Eastern Shore entered into a precedent agreement on August 2014 whereby Eastern Shore agreed to construct the facilities necessary to provide 45,000 Dth/d of OPT≤90 firm transportation service and CES agreed to execute a long-term service agreement for the same. Consequently, Eastern Shore developed the White oak Mainline Expansion Project.

The Project is designed to provide the level of OPT≤90 service specified in the CES precedent agreement and will allow Eastern Shore to furnish 45,000 Dth/day of incremental firm transportation service under Rate Schedule OPT≤90 to the White Oak Lateral interconnection with Eastern Shore's mainline system. Gas delivered to this point will be transported on the White Oak

Lateral to the Garrison Energy Center.

Eastern Shore has designed and will construct all facilities to meet or exceed the safety-related requirements imposed by the applicable provisions of the Natural Gas Pipeline Safety Act of 1968, as amended, 49 U.S.C. §§ 60101-60503, and the U.S. Department of Transportation's pipeline construction and safety standards set forth in Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, 49 C.F.R. Part 192, and all local codes and permits applicable to natural gas pipeline facilities. Eastern Shore will also comply with all applicable requirements imposed by Pennsylvania and Delaware state agencies.

Eastern Shore will operate and maintain the facilities in a manner such that pipeline integrity is preserved in the interest of assuring that a safe, continuous supply of natural gas reaches its ultimate destination. Maintenance activities will include regularly-scheduled gas leak surveys and measures necessary to repair any potential leaks. The latter may include repair or replacement of pipe segments. All fence posts, signs, marker posts, and decals will be painted or replaced to ensure that pipeline locations are visible. All valves will be periodically inspected and greased. The pipelines will be inspected on a routine basis. This will provide information on possible leaks, construction activities, erosion, exposed pipe, population density, possible encroachment, and other potential problems that may affect the safety and operation of the pipeline.

Further, Eastern Shore will operate and maintain the Project facilities in compliance with FERC's regulations, e.g., 18 C.F.R. Part 380.15, and Eastern Shore's standard procedures that are designed to ensure the integrity and safe operation of the facilities and to maintain firm natural gas transportation service. These latter standard procedures include activities such as the calibration, maintenance, and inspection of equipment, as well as the monitoring of pressure, temperature, and vibration data, and traditional landscape maintenance such as mowing and the application of fertilizer, etc.

Other maintenance functions will include as applicable (1) periodic seasonal mowing of the permanent easement in accordance with the vegetative maintenance restrictions outlined in the FERC Plan and Procedures, (2) terrace repair and backfill replacement, and (3) periodic inspection of water crossings. During permanent easement maintenance, Eastern Shore will not use herbicides or pesticides within 100 feet of a wetland or waterbody unless approved by appropriate federal, state, and local agencies. Cathodic protection facilities installed along the pipeline will be regularly monitored to maintain required pipe-to-soil potential. This will be achieved in accordance with the specifications set forth by Eastern Shore that meet or exceed USDOT regulations.

b. Facilities. The proposed facilities will be constructed using conventional construction techniques typically associated with mainline pipeline installation. The two natural gas pipeline loops within the Delaware River Basin consist of a combined total of 3.47 miles of 16-inch diameter, 0.312 wall thickness steel pipe. Approximately 75 percent of the Delaware River Basin portion of the Daleville Loop will be co-located along or within existing Eastern Shore pipeline ROW and public roadway ROWs. The entire length of the Kemblesville Alternate 2 Loop in the Delaware River Basin will be co-located within Eastern Shore's existing pipeline ROW. The typical ROW with for both the Daleville Loop and Kemblesville Alternative 2 Loop is 100 feet

wide, consisting of a 35 foot permanent easement and a 65 foot temporary workspace. In general, the pipeline trench will be deep enough to provide for approximately 4 feet of cover over the pipeline (or 2 feet in consolidated rock) as required by 49 C.F.R. Part 192 of the U.S. Department of Transportation (USDOT) regulations. No new above-ground facilities are proposed for either loop in the Basin.

The existing Delaware City Compressor Station is comprised of four Caterpillar 3516 natural gas-fired 4-stroke lean burn reciprocating internal combustion engines ("RICE"), rated at 1,085 hp each for a total of 4,340 hp. New compression facilities required at the Delaware Compressor Station will consist of two new Caterpillar 3606 natural gas-fired 4- stroke lean burn RICE. Each new compressor will have state-of-the-art air pollution control equipment coupled with an Ariel JGD/4 reciprocating gas compressor frame and pipeline cylinders. Each engine will have a rated output of 1,775 hp and will be equipped with Caterpillar's Advanced Digital Engine Management (ADEM) III electronic control system that will integrate into one comprehensive engine control system. The units will also each be equipped with a VANEC 141-18B or equivalent silencer with an oxidation catalyst to reduce air emissions.

c. Water Withdrawals and Discharges. This Project will require water for horizontal directional drilling ("HDD") and hydrostatic testing of the pipelines. All water for these activities within the Delaware River Basin will be sourced from an existing municipal system supplied by Chester Water Authority. Docket No. D-69-60 approved on May 29, 1969, amended by Docket No. D-84-55 via Resolution 89-18 on August 2, 1989 approves the import of up to 60 mgd from the Susquehanna River Basin for use in New Castle County, Delaware and Chester and Delaware Counties, Pennsylvania.

The docket holder estimates approximately 0.197 million gallons and 0.126 million gallons of water will be needed for the hydrostatic testing of the Daleville and Kemblesville Alternative 2 Loops, respectively. The larger diameter piping required for the upgrades at the Delaware City Compressor Station will require less than 0.02 million gallons, which will be sourced from a municipal supply. Condition C.I.c. requires that the docket holder shall submit the name, address, and contact information for the public water supplier that will serve the hydrostatic testing of the Compressor Station pipe in writing to the Executive Director at least 14 days prior to the purchase or use of water for said purpose. Approximately 0.326 million gallons of water will be needed for the HDD sections in the DRB. The docket holder is not approved to withdraw water from surface sources within the Delaware River Basin for this Project.

The water used for hydrostatic testing of the pipelines will be discharged to vegetated upland areas. An energy dissipater will be used and the discharge of hydrostatic test water will be limited to less than 50,000 gallons per day. The docket holder submitted applications to PADEP for Authorization to Discharge Under the NPDES General Permit for Discharges of Hydrostatic Testing of Tanks and pipelines (PAG-10) for the Daleville Loop and the Kemblesville Alternative 2 Loop on November 24, 2015 and December 18, 2015, respectively. Authorization was granted for the Daleville Loop on December 22, 2015. The application for the Kemblesville Alternative 2 Loop is currently under review by PADEP.

The hydrostatic test water discharge locations have not been identified at this time. Prior to any discharge, the docket holder must submit to the DRBC Executive Director (See Condition C.I.d) copies of the PADEP discharge approvals and the location of all hydrostatic test water discharges. Condition C.I.d. also requires that the docket holder limit the volume of discharge to less than 50,000 gallons per day.

d. Cost. The docket holder estimates that the construction cost of the Delaware River Basin portion of the Project is $24,260,000. This includes both pipeline loops and the Delaware City Compressor Station expansion.

B. FINDINGS

The purpose of this docket is to approve the construction of the Delaware River Basin portion of the docket holder's White Oak Mainline Expansion Project, including: two loops of 16-inch diameter natural gas pipeline in Chester County, Pennsylvania and the expansion of the docket holder's existing Delaware City Compressor Station in New Castle County, Delaware. The Project is necessary to provide 45,000 Dth/d of Off Peak Firm Transportation (OPT≤90) service for CES, which has executed a binding precedent agreement obligating it to execute a long-term service agreement with Eastern Shore for such service. CES will use the incremental capacity to deliver natural gas fuel to the Garrison Energy Center, a 309-MW state-of-the art, combined cycle power plant. The docket also constitutes a special use permit in accordance with Section 6.3.4 of the Commission's Flood Plain Regulations.

Eastern Shore will adhere to the FERC's 2013 Upland Erosion Control, Revegetation and Maintenance Plan (Plan) and 2013 Wetland and Waterbody Construction and Mitigation Procedures (Procedures), Eastern Shore's Erosion & Sedimentation Control (ESC) Plans, Eastern Shore's standard construction practices and policies, and any additional Project-specific requirements that may be imposed by federal, state, and local agencies or landowners for the Project.

The ESC plans for the Daleville and Kemblesville Alternative 2 Loops are currently being reviewed by the Chester County Conservation District and PADEP. PADEP will provide the authorization for coverage under PADEP's Erosion and Sediment Control General Permit 2 (ESCGP-2). Eastern Shore submitted its ESCGP-2 application for coverage for the Daleville Loop in September 2015 and the Kemblesville Alternative 2 in December 2015. The ESC plans for the Delaware City Compressor expansion portion of the Project were submitted to New Castle County Land Use Department in August 2015. New Castle County Department of Land Use issued its Sediment and Stormwater Plan approval on December 15, 2015. DNREC will provide authorization under DNREC's NPDES General Stormwater Permit 40 C.F.R. 122.28(b)(2).

Final ESC Plans and all State, County and Federal Permits are required to be submitted to the Commission prior to any site clearing or construction (see Condition C.I.b.).

Project Land and Wetland Disturbance

ESC Plan approval and ESCGP-2 approvals from the Chester County Conservation District and PADEP for the Daleville and Kemblesville Alternative 2 pipeline loops and USACE wetland and waterway crossings (Section 404) permits are pending. Construction of the DRB portion of the pipeline loops will disturb a total of approximately 44.6 acres. This total includes the permanent pipeline ROW, temporary pipeline construction workspace, additional temporary workspace ("ATWS"), staging areas and all other areas located within the limits of construction for the Delaware River Basin portions of the pipeline loops. Following construction of the pipelines, a total of approximately 2.2 acres of the 44.6 acres of land disturbed during construction will be retained as permanent ROW along the pipeline loops. The remaining 42.4 acres of temporary disturbed areas will be allowed to revert to pre-construction conditions.

The ESC Plans for the Delaware City Compressor station upgrades were approved by the New Castle County Department of Land Use on December 15, 2015. The Delaware City Compressor Station expansion will require a total of 9.1 acres of construction disturbance with 2.7 acres of land permanently impacted by the proposed facilities.

Eastern Shore will use to the extent possible, existing public and private road crossings along the Project as the primary means of accessing the ROW. In addition to the existing access available by the use of public roads, Eastern Shore will construct/upgrade one, approximately 1,236 foot long temporary access road at M.P. 1.2 of the Daleville Loop for use during the pipeline construction. Eastern Shore will also construct one permanent access road at the Delaware City Compressor Station.

The Rules of Practice and Procedure ("RPP") require Commission review for projects that "involve a significant disturbance of ground cover affecting water resources". In determining whether a "significant disturbance" would occur, the DRBC Project Review staff is guided by two other land disturbance thresholds established by RPP section 2.3.5 A: those that, respectively, exclude from review projects involving "[a] change in land cover on major ground water infiltration areas when the amount of land that would be altered is less than three square miles" (RPP § 2.3.5 A.6); and projects that involve "[d]raining, filling or otherwise altering marshes or wetlands when the area affected is less than 25 acres" (RPP § 2.3.5 A.15). In staff's view, these thresholds indicate the general magnitude of disturbance that the Commission decided warrants basin-wide review. The Project's total limit of disturbance area in the Delaware River Basin is approximately 44.6 acres (0.07 square miles), which does not exceed the 3 square mile threshold. Additionally, the alteration of wetlands associated with the Project does not exceed 25 acres as discussed in the following paragraphs.

A total of 5 separate wetlands totaling approximately 1.19 acres will be impacted in the Delaware River Basin during construction of the two pipeline loops. Approximately 0.77 acres of these wetlands are classified as palustrine forested wetlands (PFO). The remainder of the wetlands impacted during construction is palustrine emergent wetland (PEM). Approximately 0.01 acres of PEM wetlands disturbed during construction is located within the permanent easement and is land required for operation of the Project. The remainder of the wetlands impacted during construction are located outside of the permanent easement in the temporary workspace. After construction, wetland contours will be restored to their preconstruction elevations and revegetated in accordance with the PADEP approved ESC Plans. Forested wetland areas will be replanted and the project

will not result in the permanent conversion of forested wetland cover type. No wetlands are located within the limits of disturbance for the Delaware City Compressor Station.

Eastern Shore will implement wetland crossing procedures and wetland protection measures outlined in its ESC Plans. Erosion and sedimentation controls will be installed and maintained in accordance with the FERC's erosion and sedimentation control measures, to minimize impacts on wetlands. Construction methods will minimize the extent and time that construction equipment operates in wetland areas. In order to minimize impacts, the ROW width will be reduced to 75 feet within wetland areas. When wetland soils are inundated or saturated to the surface, the pipeline trench will be excavated across the wetland by equipment supported on wooden swamp mats to minimize the disturbance to wetland soils. In wetlands that have firm substrates, and are unsaturated, the top 12 inches of wetland soil over the trenchline will be segregated. ATWS will be needed adjacent to specific wetlands to facilitate the pipeline crossing. The staging areas are in addition to the typical construction ROW and may be used for the assembly and fabrication of the pipe section that will cross the wetland area. These work areas will be located at least 50 feet away from the wetland edge, topographic and other site specific conditions permitting. If topographic conditions do not permit a 50-foot setback, these areas will be located at least 10 feet away from the wetland. The work area will be limited to the minimum size necessary to safely construct the wetland crossing. Restricting the work area in this manner will minimize wetland impacts associated with pipeline construction.

Stream Crossings

PADEP Water Obstruction and Encroachment Permits and USACE wetland and waterway crossings (Section 404) Permits are pending.

The Daleville Loop will cross 5 streams (Doe Run and 4 unnamed tributaries to Doe Run) in the DRB and disturb approximately 0.09 acres of stream during construction. Two of the streams are perennial and 3 are intermittent. All streams on the Daleville Loop will be crossed using an open cut dry crossing method. The dry crossing method will involve installation of a flume pipe(s) and/or dam and pump prior to trenching to divert the stream flow over the construction area and allow trenching of the stream crossing in drier conditions isolated from the stream flow. Eastern shore will maintain downstream flow during construction activities. Intake hoses will be screened to prevent the entrapment of fish and other aquatic life and backup pumps will be maintained on site. Spoil removed during trenching will be stored away from the water's edge and protected by sediment containment structures. Surface streambed material will be stored separately from subsurface materials and returned to its original location in the streambed. Eastern Shore will generally complete in-stream work in minor waterbodies (less than 10 feet wide) within 24 hours, and in intermediate waterbodies (10 to 30 feet wide) within 48 hours.

The Kemblesville Alternative 2 Loop will cross 3 intermittent streams (unnamed tributaries to West Branch White Clay Creek) and disturb approximately 0.04 acres of stream during construction. Two streams (designated as Wild and Scenic, discussed later) will be crossed using the HDD method. This method involves a specialized machine to drill under the waterbody and pull back a pipe string as the drill pipe is withdrawn. HDD method involves no work within or direct impact to the streambed or stream banks. Drilling fluid consists mainly of a bentonite clay-water mixture. The third stream will be crossed using an open cut dry crossing method as

previously described. Excess spoil and drilling fluid must be transported to, and disposed of, at a state-approved and permitted solid waste landfill. Eastern Shore has prepared a HDD Inadvertent Surface Release Contingency Plan. Any proposed change from an HDD to an alternative crossing method requires the written approval of the Executive Director prior to initiating construction of the alternative (see Condition C.I.f.).

Eastern Shore will cross waterbodies in accordance with FERC's Plan and Procedures and state and federal permit requirements. Temporary and permanent erosion controls will be installed and maintained in accordance with Eastern Shore's approved ESC Plans. All stream banks and beds will be restored to original grade and the original stream bed material will be segregated and restored in accordance with the Project's ESC Plans.

Relationship to Reservoirs, Proposed Reservoirs or Recreation Project Areas

The Kemblesville Alternative 2 Loop crosses two designated tributaries of the White Clay Creek National Wild and Scenic River, which is a recreation project area designated in the Commission's Comprehensive Plan. Accordingly, Commission review of the Project is required. RPP § 2.3.5A.13. The National Park Service ("NPS") Northeast Region administers the White Clay Creek National Wild and Scenic River.

The two designated tributaries are unnamed tributaries of West Branch White Clay Creek and are located at Kemblesville Alternative 2 M.P. 0.38 and MP 0.49 in Franklin Township, Chester County, Pennsylvania. Eastern Shore will cross these two streams using HDD, thereby avoiding surface impacts to the streams and one wetland area.

Because the crossings will require USACE Section 404 permits, a review by the NPS under Section 7 of the Wild and Scenic Rivers Act is required. Under Section 7, NPS will determine if these crossings will have a "direct and adverse" impact on fee flow and water quality for the tributaries. NPS's preliminary review of these crossings indicates that there should be no "direct or adverse impacts" of any kind from these crossings. NPS noted that the streams crossed are small and the use of HDD would eliminate potential impacts from the crossings. Additionally, NPS indicated that compared to the originally planned route, the Kemblesville Alternative 2 route would result in less tree clearing and better meet the goals concerning the preservation of mature forest as outlined in the White Clay Creek & Its Tributaries Watershed Management Plan. The Project is currently under review by the USACE.

Floodplain Regulations

Section 6.3.4 of the Commission's Floodplain Regulations allows certain uses, including pipelines constructed within the floodway when authorized by special permit. As previously discussed, the Project pipelines will cross a total of 8 waterbodies in the DRB. In addition to the floodways associated with these steams, the Project will disturb 2 additional floodways associated with 2 nearby steams located just outside of the construction area. Two of the water bodies and floodways will be crossed using HDD. The 6 other stream and floodway crossings will be completed using open cut dry crossing methods.

The pipeline crosses a total of four FEMA-mapped 100-year floodplains. These are located at the crossings of Doe Run and an unnamed tributary of Doe Run on the Daleville Loop and two unnamed tributaries of West Branch White Clay Creek on the Kemblesville Alternative 2 Loop. Floodways were not delineated by FEMA at these locations or any other pipeline stream crossing. No permanent above ground facilities are proposed for the pipeline loops in the Delaware River Basin.

The application submitted by the docket holder assumed the floodway to extend 50 feet from each bank of the waterbody. The floodways were delineated on wetland/water body impact plates submitted as part of the application. Temporary floodway disturbances are those areas located within the Project's limit of disturbance area and are restored upon completion of construction. Permanent floodway disturbances are those areas located within the Project's limit of disturbance that are necessary for the operation and maintenance of the Project including the pipeline, construction trench and permanent easement.

The construction of the Daleville Loop will disturb a total of approximately 1.26 acres of floodway (1.19 acres of temporary disturbance and 0.07 acres of permanent floodway disturbance). This includes the area of the floodways surrounding the five stream crossings and an additional floodplain of a nearby stream near M.P. 2.4 that extends into the permanent easement.

The construction of the Kemblesville Alternative 2 Loop will disturb a total of approximately 0.6 acres of floodway (0.55 acres of temporary disturbance and 0.04 acres of permanent disturbance). This includes the area of the floodways surrounding the three stream crossings and an additional floodplain of a nearby stream near M.P. 0.66 that extends into the temporary workspace and permanent easement.

The Project will not permanently alter, modify, or obstruct any watercourses. Temporary equipment, such as dams and pumps, flumes and equipment bridges will be located in the floodway during construction of the pipeline. However, the construction within floodways will be expedited and the equipment will be removed following construction activities. Eastern Shore will install the pipelines at dry crossing areas at a minimum depth of 4 feet below each stream channel. No permanent aboveground facilities are proposed on the ground surface within a floodway. If necessary, the pipeline sections beneath the stream channels will be weighted to negate any potential buoyancy effects. Following the construction of the pipelines, the stream channel bed and banks are required to be restored to preconstruction contours, vegetation and hydrology. No spoil or fill material will remain in the floodway following construction of the pipeline. This docket constitutes a special use permit for the pipeline in accordance with Section 6.3.4 of the Commission's Flood Plain Regulations for a pipeline within floodway and flood fringe areas. A list of the streams and floodways crossed by the pipeline Project are presented in the following table.

DRB STREAMS AND FLOODWAYS CROSSED BY THE WHITE OAK MAINLINE EXPANSION PROJECT				
Waterbody Name	**Loop and Milepost**	**Bank Width (feet)**	**Floodway Crossing**	**Flow Type**

			Length (feet)	
Doe Run	Daleville M.P. 0.94	10	190	Perennial
UNT to Doe Run	Daleville M.P. 1.29	6	110	Perennial
UNT to Doe Run	Daleville M.P. 1.32	2	130	Intermittent
UNT to Doe Run	Daleville M.P. 2.12	3	125	Intermittent
UNT to Doe Run	Daleville M.P. 2.15	4	115	Intermittent
UNT to Doe Run	Daleville M.P. 2.4	Stream not crossed with pipe	0	Intermittent
UNT to W. Branch White Clay Creek	Kemblesville Alt 2 M.P. 0.38	8*	240*	Intermittent
UNT to W. Branch White Clay Creek	Kemblesville Alt 2 M.P. 0.49	16*	165*	Intermittent
UNT to W. Branch White Clay Creek	Kemblesville Alt 2 M.P. 0.65	14	225	Intermittent
UNT to W. Branch White Clay Creek	Kemblesville Alt 2 M.P. 0.66	Stream not crossed with pipe	Overlaps and included in above	Intermittent

*Denotes HDD Crossing

Other Federal, State, and Local Permits/Approvals

The following table lists approvals related to water resources in the Delaware River Basin for the Eastern Shore Project.

AGENCY	**PERMIT**	**PERMIT NO.**	**DATE OF APPROVAL**
FERC	Certificate of Public Convenience and Necessity	CP15-18-000, CP15-18-001	Pending
USACE	Joint Application for Section 404 Permit	Pending	Pending
PADEP	Joint Application for Chapter 105 Water Obstruction and Encroachment Permit	Pending	Pending
PADEP	Section 401 Water Quality Certification	Pending	Pending
PADEP	ESCGP-2	Pending	Pending

PADEP	PAG-10 Hydrostatic Discharge approval-Daleville Loop	PAG100041	December 10, 2015
PADEP	PAG-10 Hydrostatic Discharge approval-Kemblesville Alternative 2 Loop	Pending	Pending
Chester County Conservation District	Erosion and Sediment Control Plan Review – Daleville Loop and Kemblesville Alternative 2 Loop	Daleville Loop: ESG-00-029-15-001 Kemblesville Alternative 2 Loop Pending	December 10, 2015* Pending
DNREC	Coastal Zone Management Act – Compressor Station	FC 2015.0155	October 16, 2015
DNREC	NPDES NOI General Stormwater Permit	4994	October 27, 2015
New Castle County Land Use Department	Sediment and Stormwater Plan approval	No. 20150221	December 15, 2015

*approved, but permit on hold until authorized by PADEP.

Docket Approval Duration

Commission approval of the project, including the special permit within floodway areas, will remain in effect for the life of the project. Therefore, the docket has no expiration date.

Other

The Project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

The Project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-2015-020-1, the project and appurtenant facilities as described in Section A. (Physical features) are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the FERC, USACE, PADEP, DNREC, Chester County Conservation District and New

Castle County Department of Land Use and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction. Prior to commencing any site clearance or construction, the docket holder shall submit to DRBC the final erosion and sediment control and restoration permits issued by State, County and Federal agencies.

c. The docket holder shall submit the name, address, and contact information for the public water supplier that will serve the hydrostatic testing of the Compressor Station pipe in writing to the Executive Director at least 14 days prior to the purchase or use of water for said purpose. The docket holder shall not, withdraw, purchase or receive any water from any sources unless and until the docket holder notifies the DRBC Executive Director in writing and receives written approval from the Executive Director.

d. The docket holder shall submit copies of PADEP discharge approvals and the location of all hydrostatic test water discharges to the DRBC Executive Director at least 14 days prior to the discharge. The docket holder shall limit the volume of discharge to less than 50,000 gallons per day.

e. With the exception of bentonite and water and PADEP-approved additives, no other additives shall be used in the HDD process. Used drilling mud and solids from the drilling process shall be disposed of at a State-approved disposal facility.

f. Any proposed change from an HDD to an alternative crossing method requires the written approval of the Executive Director prior to initiating construction of the alternative.

g. The docket holder shall submit bid-final construction plans to the Commission and obtain the written approval by the Executive Director prior to any site clearance or construction.

h. Within 30 days of completion of construction of the approved project, the docket holder is to submit to the attention of the Project Review Section of DRBC a Construction Completion Statement ("Statement") signed by the docket holder's professional engineer for the project. The Statement must (a) either confirm that construction has been completed in a manner consistent with any and all DRBC-approved plans or explain how the as-built project deviates from such plans; (b) report the project's final construction cost as such cost is defined by the project review fee schedule in effect at the time application was made; and (c) indicate the date on which the project was (or is to be) placed in operation.

i. This approval of the construction of facilities described in this docket shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has provided the Executive Director with written notification that is has

expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

j. The docket holder shall report in writing to the Commission Project Review Section Supervisor any violation of the docket conditions within 48-hours of the occurrence or upon the docket holder becoming aware of the violation. In addition, the docket holder shall report in writing any violations of any other docket conditions to the Commission Project Review Section Supervisor within three days of the violation. The docket holder shall also provide a written explanation of the causes of the violation within 30 days of the violation and shall set forth the action(s) the docket holder has taken to correct the violation and protect against a future violation.

k. This docket constitutes a special use permit under Section 6.3.4 of the Commission's Flood Plain Regulations for a pipeline within floodway and flood fringe areas.

l. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

m. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

n. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

o. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

BY THE COMMISSION

APPROVAL DATE: March 16, 2016