DOCKET NO. D-2013-021-1

DELAWARE RIVER BASIN COMMISSION

Special Protection Waters

Tennessee Gas Pipeline Company, L.L.C., 300 Line Project
Pipeline, Temporary Surface Water Withdrawal and Discharge
Mount Pleasant, Clinton, Dyberry, Berlin Townships and Bethany and Honesdale Boroughs in Wayne County, Pennsylvania, Lackawaxen, Shohola and Milford Townships in Pike County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an application submitted by the Tennessee Gas Pipeline Co., L.L.C. (TGP) to the Delaware River Basin Commission (DRBC or Commission) on November 1, 2013, with additional application materials submitted on November 22, 2013, December 5, 2013, December 26, 2013 and May 22, 2014 (collectively, "the Application"), for the after-the-fact approval of TGP's 300 Line Project, Federal Energy Regulatory Commission Docket No. CP09-444-000 ("the Project"), consisting of a natural gas pipeline and involving the temporary withdrawal and allocation of surface water and temporary land discharge of hydrostatic test water. FERC authorized TGP to commence service by the Project on October 28, 2011 and the Project was placed in-service as of November 1, 2011.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Wayne County Planning Commission and Pike County Planning Commission have been notified of pending action on this docket. A public hearing on the draft docket was held by the DRBC on June 9, 2015.

A. DESCRIPTION

1. Purpose. The purpose of this docket is the after-the-fact approval of the construction of a natural gas pipeline and appurtenances within the DRB, as described below, including:

a. the withdrawal of up to a total of 5.54 million gallons (Mg) of surface water from Dyberry Creek and Shohola Creek for hydrostatic testing of the in-basin portions of two new pipeline loops; and

b. the temporary discharge of hydrostatic testing water to the land surface at five locations after completion of hydrostatic testing of the pipeline.

c. The docket also constitutes a special use permit in accordance with Section 6.3.4 of the Commission's Flood Plain Regulations

2. **Location.** Loop 321 of the TGP 300 Line Project begins in Herrick Township, Susquehanna County, Pennsylvania, continues eastward and enters the Delaware River Basin (DRB) approximately 1 mile south southwest of the intersection of Belmont Turnpike and Pleasant Mount Drive in Mount Pleasant Township, Wayne County and ends just southwest of the intersection of Bethel School Road and Adams Pond Road in Berlin Township, Wayne County, PA. Approximately 6 miles of the westernmost portion of the loop is located in the Susquehanna River Basin; the remainder of the pipeline (approximately 16.4 miles) is located within the DRB. The 16.4 miles of Loop 321 located within the DRB are located in the drainage area of the portions of the non-tidal main stem Delaware River known as the Upper Delaware River, which the Commission has designated as Special Protection Waters (SPW).

Loop 323 of the TGP 300 Line Project is located entirely within the DRB. Loop 323 begins approximately one quarter mile northeast of the intersection of Westcolang Road and State Route 590 in Lackawaxen Township, Pike County, PA and ends approximately 2.25 miles north of the intersection of Interstate 84 and U.S. Route 6 in Milford Township, Pike County, PA. The total length of Loop 323 is 14.9 miles. Approximately 1.5 miles of the easternmost section of the pipeline is located in the Delaware State Forest, a recreational area included in the Commission's Comprehensive Plan. Compressor Station 323 is located near the beginning of Loop 323 in Lackawaxen Township, Pike County, PA. Loop 323 is located in the drainage area of the portions of the non-tidal main stem Delaware River known as the Upper and Middle Delaware, which the Commission has designated as Special Protection Waters (SPW).

Specific locations of the start and end points of the pipeline loops are as follows:

Loop 321 (Wayne County, Pennsylvania)	
POINT	**TGP MILEPOST**
Loop Enters DRB	5.9
End of Loop	22.3

Loop 323 (Pike County, Pennsylvania)	
POINT	**TGP MILEPOST**
Start of Loop	0.0
Loop Enters Delaware State Forest	13.4
End of Loop	14.9

Following the installation of the natural gas pipeline loops, TGP conducted hydrostatic tests to verify the integrity of the pipe. Information concerning the water source is set forth in the tables below:

LOOP 321	
Source	Dyberry Creek
Municipality	Dyberry Township, Wayne County, PA
TGP Milepost	17.52
Coordinates (degrees)	41° 35' 48" N, 75° 15' 57"W
HUC12 Watershed Name	020401030203 (Big Brook-Dyberry Creek)
PADEP Water Use Designation	HQ-CWF, MF
DRBC SPW Area	Upper
Total Withdrawal Volume	2.98 million gallons
Withdrawal Dates	September 1-4, 2013

LOOP 323	
Source	Shohola Creek
Municipality	Shohola Township, Pike County, PA
TGP Milepost	8.36
Coordinates (degrees)	41° 25' 28" N, 74° 56' 50"W
HUC12 Watershed Name	020401040403 (Lower Shohola Creek)
PADEP Water Use Designation	HQ-CWF, MF
DRBC SPW Area	Upper
Total Withdrawal Volume	2.56 million gallons
Withdrawal Dates	October 3-4, 2013 and October 11-12, 2013

TGP utilized additional water (0.2 million gallons), which was hauled from hydrants located in Hawley Borough and Honesdale Borough, Pennsylvania. Both of these public water supply systems are owned and operated by Aqua Pennsylvania ("Aqua"). The Honesdale system is described in DRBC Docket No. D-1995-057 CP-2, issued by the Commission on March 3, 2010. The Hawley system is described in DRBC Docket No. D-2014-007 CP-1 approved on December 10, 2014.

Discharge Location Information

After testing, the hydrostatic test water was removed from the pipeline and transferred directly to energy dissipating dewatering structures via 6-inch diameter pipe at five approved upland surface locations within the pipeline right-of-way in the DRB.

Loop 321 - Test Manifold #4 Discharge	
Municipality	Clinton Township, Wayne County, PA
TGP Milepost	7.24
Coordinates (degrees)	41° 41' 3" N, 75° 25' 8"W
Nearest Receiving Stream	Unnamed Tributary to West Branch Lackawaxen River
PADEP Water Use Designation	HQ-CWF, MF
HUC12 Watershed Name	020401030103 (Belmont Lake-West Branch Lackawaxen River)
DRBC SPW Area	Upper
Discharge Volume and Date	0.441 Mg (9/20/2011 to 9/21/2011) 1.295 Mg (9/22/2011 to 9/23/2011)

Loop 321 - Test Manifold #5 Discharge	
Municipality	Dyberry Township, Wayne County, PA
TGP Milepost	14.42
Coordinates (degrees)	41° 37’ 53” N, 75° 19’ 3”W
Nearest Receiving Stream	Unnamed Tributary to W.B. Lackawaxen River
PADEP Water Use Designation	HQ-CWF, MF
HUC12 Watershed Name	020401030103 (Belmont Lake-West Branch Lackawaxen River)
DRBC SPW Area	Upper
Discharge Volume and Date	1.444 Mg (9/24/2011 to 9/25/2011)

Loop 323 - Test Manifold #2 Discharge	
Municipality	Lackawaxen Township, Pike County, PA
TGP Milepost	1.61
Coordinates (degrees)	41° 29’ 24” N, 75° 2’ 11”W
Nearest Receiving Stream	O’Donnell Creek
PADEP Water Use Designation	HQ-CWF, MF
HUC12 Watershed Name	020401030603 (Lackawaxen River-Delaware River)
DRBC SPW Area	Upper
Discharge Volume and Date	0.297 Mg (10/16/2011)

Loop 323 - Test Manifold #3 Discharge	
Municipality	Lackawaxen Township, Pike County, PA
TGP Milepost	3.45
Coordinates (degrees)	41° 28’ 25” N, 75° 1’ 9”W
Nearest Receiving Stream	Mill Creek and Lords Creek
PADEP Water Use Designation	HQ-CWF, MF
HUC12 Watershed Name	020401030603 (Lackawaxen River-Delaware River)
DRBC SPW Area	Upper
Discharge Volume and Date	1.269 Mg (10/16/2011)

Loop 323 - Test Manifold #5 Discharge	
Municipality	Shohola Township, Pike County, PA
TGP Milepost	12.36
Coordinates (degrees)	41° 23’ 28” N, 74° 53’ 8”W
Nearest Receiving Stream	Savantine Creek
PADEP Water Use Designation	EV, MF
HUC12 Watershed Name	020401040701 (Sawkill Creek)
DRBC SPW Area	Middle
Discharge Volume and Date	0.462 Mg (10/6/2011) 0.534 Mg (10/7/2011)

3. **Area Served.** Project water withdrawals and discharges were temporary and served the Project only for hydrostatic testing purposes as described in the Description section below. For the purpose of defining Area Served, the Application is incorporated herein by reference subject to conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** TGP expanded the capacity of the existing 300-Line facilities within the DRB via the installation of approximately 31.3 miles of pipeline in two segments, Loop 321 and Loop 323, and the modification of existing Compressor Station 323. The Loop 321 upgrade within the DRB includes approximately 16.4 miles of new 30-inch diameter pipeline in Wayne County, Pennsylvania. The 323 Loop upgrade includes 14.9 miles of new 30-inch diameter pipeline in Pike County, Pennsylvania, approximately 1.5 miles of which crossed the Delaware State Forest, a recreational area included in the Comprehensive Plan. TGP also installed new 30-inch-diameter mainline valve (MLV) assemblies along each of the pipeline loops adjacent to TGP's existing MLV sites. In addition, the pipeline loop segments were installed with either a new pig launcher or receiver to accommodate internal cleaning and inspection of the pipeline loops. TGP also modified the existing Compressor Station 323, located in Lackawaxen Township, Pike County, Pennsylvania. The Compressor Station 323 modification entailed the installation of an inlet gas filter-separator. No utility construction work was necessary and all of the construction activities occurred within TGP's existing 93-acre site and within the 7-acre fenceline.

The pipeline loop segments, constructed of new, 30-inch diameter coated steel pipe, were installed parallel to the existing Tennessee 300 pipeline corridor and generally within the existing, maintained right of way. In upland areas, the temporary construction right-of-way was 100 feet wide. In wetlands the construction right-of-way was reduced to a 75 foot width. The permanent right-of-way of the new pipeline loops is approximately 50 feet wide, consisting of 25 feet of existing right-of-way already retained for operation of the 300 Line and 25 feet of new right-of-way for the loops. In forested wetlands, the permanent ROW is also 50 feet wide, but only a 10-foot wide area centered over the pipeline will be maintained in an herbaceous or scrub-shrub vegetated state.

TGP utilized existing public and private roadways to temporarily access the construction right-of-way. The Project resulted in the construction of one new permanent road, which is used to access a new pig launcher located at MP 14.9 along Loop 323 in the Delaware State Forest. This road impacted 3.6 acres of land which will be permanently maintained for pipeline operations.

Once the pipeline installation was complete, hydrostatic testing of new pipe for Loops 321 and 323 was performed. In September 2011, a total of 2.98 Mg of water was withdrawn from Dyberry Creek over a four-consecutive-day period for the testing of Loop 321. An additional volume of 0.2 Mg of water was hauled from Aqua's Honesdale and Hawley water systems and stored in 13 tanks for hydrostatic testing of the 321 Loop. In October 2011, a total of 2.56 Mg of water was withdrawn from Shohola Creek over two separate two-consecutive-day periods for the testing of Loop 323.

At the conclusion of hydrostatic testing, the water used for the hydrostatic testing was returned to the Delaware River Basin via discharge in vegetated, upland locations as indicated above. Water was discharged to energy dissipating dewatering structures located at each of the discharge locations and controlled at a maximum rate of 1,500 gallons per minute (gpm). No direct discharge of hydrostatic testing waters to surface water bodies or wetlands occurred. Controls for the protection of surface water during the hydrostatic testing discharge activities included the installation of a double hay bale barrier, deflector pipe and splash plates. The deflector pipe functioned to further disperse and reduce the force of the discharge and splash plates protected the hay bale/geotextile barrier from the continuous impact of the discharge. TGP provided a trained Environmental Inspector (EI) on-site at all times during discharge activities to monitor, manage and direct the construction contractor to maintain the integrity of erosion control structures and minimize impacts to the surrounding area.

b. Facilities. The Project surface water withdrawals had the following characteristics:

WITHDRAWAL WATER BODY	PUMP CAPACITY	7Q10 FLOW AT INTAKE	DRAINAGE AREA	TOTAL WITHDRAW	WITHDRAWAL DATES
Dyberry Creek	2,850 gpm	4.91 cfs	68 Sq. Mi.	2.98 Mg	9/1 to 9/4/11
Shohola Creek	2,850 gpm	4.42 cfs	70 Sq. Mi.	2.56 Mg	10/3-10/4/11 and 10/11-10/12/11

All withdrawals were metered.

The water was not treated prior to use.

The Project intakes were located within the 100-year floodplain.

At each withdrawal site, water was withdrawn using a Cornell W Series pump with a design capacity of 2,850 gpm at 90 pounds per square inch. The intake was screened to avoid entrainment of fish. Flows were measured with a totalizing flow meter as water was withdrawn from each site.

An additional 0.2 Mg of water was hauled by truck and used for the hydrostatic testing of Loop 321.

c. Hydrostatic Test Discharge Permits. The Loop 321 and Loop 323 discharge sites were approved by the PADEP on November 23, 2010 and revised September 20, 2011. No additives were used during hydrostatic testing. As required by PADEP, water samples (grab) were taken at the beginning and end of the discharge period and tested for the parameters specified in the following table:

EFFLUENT TABLE A: Parameters Included in PADEP Discharge Approval

Loops 321 and 323		
PARAMETER	**LIMIT**	**MONITORING**
Flow (gpm)	n/a	Monitor and report
Duration (hours)	n/a	Monitor and report
pH (Standard Units)	6 to 9 at all times	2 grab samples per discharge
Total Suspended Solids	60 mg/l	2 grab samples per discharge
Dissolved Oxygen	5 mg/l (minimum at all times)	2 grab samples per discharge
Oil and Grease	30 mg/l	2 grab samples per discharge
Iron	7 mg/l	2 grab samples per discharge
Total Residual Chlorine	0.05 mg/l	2 grab samples per discharge

Test results submitted by the docket holder showed that except for one sample the effluent quality for the tested parameters was within the PADEP permitted limits. The exception was one of the two samples collected at Loop 323 TM#2 that was found to contain 100 mg/l total suspended solids, 13.8 mg/l iron and a pH of 4.77 standard units. For this sample, the results for TSS and iron exceeded the PADEP permitted limits of 60 mg/l and 7 mg/l, respectively and the minimum pH value of 6 standard units.

e. **Cost.** The total cost of this Project was $751,833,820.

B. FINDINGS

On April 10, 2013 the DRBC notified TGP that after-the-fact review of the TGP 300 Line Project was required in accordance with Section 3.8 of the Delaware River Basin Compact, P.L. 87-328 (1961), and implementing regulations. Specifically, Section 2.3.5 A.12 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 401.35 (12), provides for the review of natural gas transmission line projects that "pass in, on, under or across an existing or proposed … recreation project area as designated in the Comprehensive Plan …." The Project traverses Delaware State Forest in Pike County, Pennsylvania, a recreation area that has been incorporated into the Commission's Comprehensive Plan. The Project was not reviewed by the Commission prior to its construction due to a project screening oversight by Commission staff.

On May 14, 2010, FERC issued its Order Issuing Certificate authorizing TGP to construct, own and operate the Project including Loops 321, 323 and Compressor Station 323. Clearing and construction of the Pipeline Loops commenced in May 2011. Construction was completed, and on October, 4, 2011 and October 28, 2011, respectively, FERC granted authorization to place Loop 321 and Loop 323 in service and the Project was placed in-service as of November 1, 1011. By November 2011, 93 percent of the land disturbed by the construction of Loop 321 and 35 percent of the land disturbed by the construction of Loop 323 had been restored. Areas for which final restoration was not complete underwent winter stabilization in accordance with TGP's Winterization Plan. Final Restoration activities for the winterized portions of the pipeline were completed in 2012. FERC inspected Loops 321 and 323 on October 3, 2012 and found no instances of non-compliance. However, areas of sparse vegetation were

noted on Loop 323. At the present time, TGP continues to monitor the rights-of-way and vegetative growth.

Special Protection Waters

In 1992, the DRBC amended its *Water Quality Regulations* (WQR) by the addition of Special Protection Waters ("SPW") requirements to protect exceptionally high water quality in reaches of the main stem Delaware River and associated tributaries where existing water quality is better than the applicable criteria require. One hundred twenty miles of the main stem Delaware River from Hancock, New York downstream to the Delaware Water Gap were simultaneously designated by the Commission as SPW. This stretch includes sections of the river federally designated as "Wild and Scenic" in 1978 – the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area – as well as an eight-mile reach between Milrift and Milford, Pennsylvania. In 2000, federal legislation was enacted adding to the National Wild and Scenic Rivers System a 76-mile reach of the main stem known as the "Lower Delaware," from the downstream boundary of the Delaware Water Gap National Recreation Area to the head of tide at Trenton, NJ; and in 2008 the DRBC amended its *Water Quality Regulations* to extend SPW classification to the Lower Delaware and to strengthen and clarify elements of the SPW program.

The WQR states that applicants for the approval of projects subject to review under Section 3.8 of the Compact that are located within the drainage area of Special Protection Waters must as a condition of approval submit a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated by the Project and portions of the Project's service area located within the SPW drainage area. Because the Project is located within the SPW drainage area, the non-point source pollution control plan requirement must be satisfied.

The docket holder submitted the ENVIRONMENTAL CONSTRUCTION PLAN (ECP), 300 Line Project – Pennsylvania and New Jersey, July 2009 to FERC on July 17, 2009. TGP submitted a revised ECP to FERC on June 1, 2010. The docket holder based the specifications in the ECP on procedures successfully used in constructing, operating and maintaining transmission systems throughout the United States, and on guidelines and recommendations from the U.S. Army Corps of Engineers, the U.S. Department of Agriculture, the Natural Resources Conservation Service, and the Federal Energy Regulatory Commission (FERC). The ECP met all conditions outlined in FERC's Wetland and Waterbody Construction and Mitigation Procedures and the Upland Erosion Control, Revegetation and Maintenance Plan except in areas where the docket holder requested and FERC accepted a waiver from certain conditions, such as temporary workspace encroachments on wetlands and waterbodies in limited instances where the encroachments were unavoidable.

Commission staff reviewed the ECP and have determined that the plan fulfills the Non-Point Source Pollution Control Plan requirement for projects located in Special Protection Waters.

Land Disturbance

Construction of Loop 321 affected a total of approximately 423 acres of land. This total includes the pipeline facilities and construction right-of-way, additional temporary workspace, the contractor pipe yard and access roads. The total disturbance in the DRB is less than this amount because this total includes the approximately 6-mile portion of the pipeline loop located outside the DRB. Construction of Loop 323 affected a total of approximately 284 acres of land. This total includes the pipeline facilities and construction right-of-way, additional temporary workspace and access roads. Following the construction of Loops 321 and 323, approximately 65 acres and 45 acres of land were retained as permanent right-of-way along the pipeline loops, respectively. Additionally, one access road, totaling 3.6 acres was permanently retained for access to a new pig launcher at Loop 323 (M.P. 14.9).

Delaware State Forest

Loop 323 crosses the Delaware State Forest (DSF) between MP 13.4 and 14.9 in Shohola and Milford Townships, Pike County, PA. The DSF contains heavily forested wetlands and glacial bogs, lakes and streams. Recreational activities within the DSF include hiking, camping, hunting, fishing and picnic and educational centers. The DSF is administered by the Pennsylvania Department of Conservation and Natural Resources Bureau of Forestry (PABF). The DSF is a recreational area included in the Commission's Comprehensive Plan. PABF issued a timber sale agreement, a license for right-of-way amendment, and a road use agreement for the pipeline loop in the DSF.

The 323 loop was constructed approximately 25 feet from the existing 300-line within the existing 100-foot wide right-of-way. A total of 28.6 acres of land (23.8 acres of which was forested) was disturbed during the construction of the pipeline in the DSF. After construction, approximately 9.2 acres of previously forested land in the permanent right-of-way and 3.6 acres of previously forested land for a permanent access road were retained as open land for operation of the new pipeline loop. Loop 323 also temporarily affected one water body (Craft Brook) located at MP 14.34. TGP utilized the dry dam and pump-around crossing method at this location. The pipeline crossed 3 separate delineated wetland areas within the DSF resulting in approximately 1.5 acres of disturbance during construction. Approximately 0.2 acres of wetlands within 10 feet of the pipeline will be permanently disturbed due to continued maintenance of the pipeline right-of-way. The Timber Sale Contract between TGP and the PABF required TGP to implement certain environmental protections along the pipeline and access roads in the DSF, including following detailed logging procedures, haul and skid road guidelines, a soil and erosion control plan, and invasive plant and revegetation guidelines. In April 2013, tree and shrub plantings were completed in the DSF.

Stream Crossings

PADEP issued Water Obstruction and Encroachment Permit No. E64-282 to TGP for Loop 321 on April 6, 2011. The USACE issued Permit No. CENAB-OP-RPA-20082905-12 to TGP for Loop 321 on April 19, 2011, authorizing the discharge of dredged or fill material under Section 404 of the Clean Water Act.

Loop 321 crossed 21 waterbodies in the DRB temporarily affecting approximately 1,768 feet of stream channel. (This footage includes four additional stream crossings located in Wayne County in the SRB; therefore total footage in the DRB is slightly less.) Additionally, one water

body was crossed by a temporary access road. Sixteen of the stream crossings are designated by the PADEP as high quality-cold water fisheries supporting migratory fishes (HQ-CWF, MF). The other six (6) water bodies crossed are designated by the PADEP as high quality-cold water fisheries (HQ-CWF). All water bodies were crossed using the dry crossing method, involving the installation of temporary dams and flumes or pumps to temporarily divert stream flow around the work area to minimize contact between stream water and the trench excavation and to minimize sediment suspension during construction activities.

PADEP issued Water Obstruction and Encroachment Permit No. E52-217 to TGP for Loop 323 on April 13, 2011. The USACE issued Permit No. CENAB-OP-RPA-20082905-12 to TGP for Loop 323 on April 19, 2011, authorizing the discharge of dredged or fill material under Section 404 of the Clean Water Act.

The Loop 323 pipeline crossed 12 waterbodies in the DRB, temporarily affecting approximately 952 feet of stream channel. Temporary access roads crossed two additional streams. Eleven of the stream crossings are designated by the PADEP as high quality-cold water fisheries supporting migratory fishes (HQ-CWF, MF); two of the streams are designated by the PADEP as exceptional value streams supporting migratory fishes (EV-MF); and one stream is designated by the PADEP as a high quality, trout stocked fishery supporting migratory fishes (HQ-TSF, MF).

With the exception of the Lackawaxen River Crossing, all water bodies were crossed using the dry crossing method described above. The Lackawaxen River was crossed using a wet crossing method. An equipment bridge, consisting of rock and a series of 36-inch diameter flume pipes was installed across the river to facilitate the installation of the pipeline and provide a means of travel across the river. Rock filters and compost socks were used to reduce turbidity during the construction period. Following the installation of the pipeline, the stream bed and banks were restored to previous contours and vegetated in accordance with TGP's Lackawaxen River Restoration Plan, dated May 2011.

Wetland Disturbance

TGP implemented wetland construction procedures, including reduced workspace corridors, use of timber mats where necessary to reduce rutting, and topsoil segregation and expedited construction and restoration activities to minimize impacts to wetlands. During construction of Loop 321, a total of 51 wetland areas totaling approximately 10.95 acres were temporarily disturbed. During construction of Loop 323, a total of 41 wetland areas totaling approximately 8.05 acres were temporarily disturbed. Following construction of Loops 321 and 323, approximately 14.8 acres of the combined 19.0 acres of temporarily disturbed wetlands were restored to preconstruction contours, vegetation and hydrology, in accordance with TGP's Wetland Mitigation Plan dated 2011. Because of the location above the newly installed pipeline, approximately 4.2 acres of forested wetlands within the new permanent easement will be permanently maintained in an herbaceous or emergent vegetation cover type. USACE required replacement mitigation for the 4.2 acres of permanent conversion of forested wetlands to emergent wetlands within the Philadelphia District. The replacement mitigation was completed at the Starlight Lake Mitigation Site, located in Wayne County, Pennsylvania.

The PADEP and USACE permits cited in the previous section of this docket (Stream Crossings) authorized the wetland disturbance described above.

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 noted above, the 321 and 323 pipeline loops involved a total of 33 stream crossings. Although FEMA did not delineate floodways for all of the streams crossed by the pipeline loops, it is assumed that each waterbody crossed by the pipeline contains a floodway at least as large as the stream's bank-to-bank width. TGP installed the pipelines at a depth of 5 feet below each stream channel. No permanent structures were placed on the ground surface within the floodway areas. Additionally, the pipeline sections beneath the stream channels were weighted as necessary to negate any buoyancy effects. Following the construction of the pipelines, the stream channel bed and banks were restored to preconstruction contours, vegetation and hydrology. 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. Floodways crossed by the pipeline are presented in the following tables.

FLOODWAYS CROSSED BY LOOP 321 (WAYNE COUNTY, PA)				
FEATURE ID	**WATERBODY NAME**	**MILEPOST**	**BANK WIDTH (FEET)**	**FLOW TYPE**
S033	UNT to W.B. Lackawaxen River	7.8	6	Intermittent
S034	UNT to W.B. Lackawaxen River	7.8	10	Intermittent
S058	UNT to W.B. Lackawaxen River	8.4	15	Intermittent
S038	West Branch Lackawaxen River	10.8	55	Perennial
S040	UNT to W.B. Lackawaxen River	11.1	2	Intermittent
S042	UNT to W.B. Lackawaxen River	11.6	6	Intermittent
S044	UNT to W.B. Lackawaxen River	11.9	10	Perennial
S044D	UNT to W.B. Lackawaxen River	12.9	NA	NA
S045	UNT to W.B. Lackawaxen River	14.7	8	Perennial
S046	UNT to Dyberry Creek	15.9	8	Intermittent
S047	UNT to Dyberry Creek	16.3	10	Intermittent
S048	UNT to Dyberry Creek	16.5	4	Intermittent
S049	Dyberry Creek	17.5	50	Perennial
S052	Carley Brook	19.0	25	Perennial
S053	UNT to Carley Brook	19.4	10	Intermittent
S054	Holbert Creek	20.3	20	Perennial
S054A	UNT to Indian Orchard Brook	21.4	NA	NA
S055	UNT to Indian Orchard Brook	21.2	10	Intermittent
S056	Indian Orchard Brook	21.4	6	Perennial
S057	UNT to Indian Orchard Brook	21.4	12	Perennial
S051A	UNT to Indian Orchard Brook	21.4	NA	NA

FLOODWAYS CROSSED BY LOOP 323 (PIKE COUNTY, PA)				
FEATURE ID	**WATERBODY NAME**	**MILEPOST**	**BANK WIDTH (FEET)**	**FLOW TYPE**
S001	Lackawaxen River	2.2	106	Perennial
S007A	UNT to West Falls Creek	0.0	10	Intermittent
S010	UNT to Lords Creek	3.4	3	Intermittent
S015	Lords Creek	4.2	175	Perennial
S018	Lords Creek	4.3	NA	Open water
S020	UNT to Shohola Creek	7.3	4	Intermittent
S004	Shohola Creek	8.4	75	Perennial
S009	UNT to Shohola Creek	8.7	3	Intermittent
S047	Walker Lake Creek	10.1	NA	Perennial
S005	Twin Lakes Creek	11.2	15	Perennial
S008	Savantine Creek	12.7	20	Perennial
S035	Craft Brook	14.4	8	Perennial

Other Federal, State, and Local Permits/Approvals

The following table lists approvals related to water resources in the Delaware River Basin for the TGP 300 Line Project.

AGENCY	APPROVAL	PERMIT NO.	DATE OF APPROVAL
FERC	Order Issuing Certificate and Approving Abandonment	Docket No. CP09-444	May 14, 2010
PADEP	ESCGP-1	ESCGP-1 00 09 801	January 27, 2011 July 21, 2011
PADEP	Water Obstruction and Encroachment Permit (Loop 321)	E64-282	April 6, 2011
PADEP	Water Obstruction and Encroachment Permit (Loop 323)	E52-217	April 13, 2011
USACE	Section 404 Wetland and Waterbodies	CENAB-OP-RPA-20082905-12	April 19, 2011
PADEP	Hydrostatic Testing Discharge Approval	Letter Approval	November 23, 2010
PABF	Timber Sale Agreement (Delaware State Forest)	Contract No. 192011DF01	May 16, 2011
PABF	Road Use Agreement (Delaware State Forest)	Agreement No. FM-9451	June 13, 2011
PABF	License for ROW Amendment	FM-8144	May 16, 2011

Current Project Status

Based on the Quarterly Status Report for the Period December 1, 2014 through February 28, 2015, all erosion control devices have been removed and an Environmental Inspector continues to monitor the right-of-way and vegetative growth as needed. The most recent FERC Field Inspection of the project was conducted by helicopter overflight on September 3, 2014. The restoration inspection report indicated no areas of major concern; however, areas of sparse vegetation along the 321 and 323 Loops were noted. FERC recommended another restoration inspection in 2015 to inspect and document the restoration of the eastern Pennsylvania/New Jersey portion of the project including Loops 321 and 323. That inspection had not been conducted at the time of preparation of this docket in May 2015.

On May 14, 2014 DRBC staff observed portions of the completed pipeline project. Staff were accompanied by a Tennessee Environmental Inspector. During the field visit, staff observed and photographed several stream crossings (Craft Brook, Shohola Creek, Lackawaxen River, Dyberry Creek and West Branch Lackawaxen River), a wetland area and the right-of-way in parts of the Delaware State Forest. No areas of major concern were observed.

Staff reviewed the Post-Construction Monitoring Report – Year 3, which was submitted to FERC by TGP on February 20, 2015. The report indicated that 3 waterbody crossings and 5 wetland crossings on the 321 loop and 1 waterbody and 4 wetland crossings on the 323 loop were not yet successfully restored based on FERC restoration criteria. Three (3) of the areas on Loop 321 were assigned as medium priority areas and have been or will be addressed by TGP. Issues at these areas included stream bank erosion causing flow blockage and the presence of invasive species. The other areas were ranked as low priority requiring additional time for growth, and will be inspected again during the Year 4 post-construction monitoring event.

Docket Approval Duration

Because this docket approves only the construction, not the operation of the new pipeline, the docket has no expiration date. The temporary withdrawals and discharges described in this docket have occurred. No additional withdrawals or discharges are permitted under the terms of this docket. TGP must receive Commission approval for any additional withdrawals or discharges. Commission approval of the pipeline located in the Delaware State Forest and the approval by special permit within floodway areas will remain in effect for the life of the project. TGP must receive Commission approval if the pipeline described in this docket is modified or additional withdrawals and/or discharges occur.

DRBC estimates that the project withdrawals, used for the purpose of hydrostatic testing resulted in a consumptive use of less than 30 percent of the total water use for that purpose. The DRBC definition of consumptive use is set forth in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project as constructed conforms to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

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

C. DECISION

I. Effective on the approval date for Docket No. D-2013-021-1, 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 PADEP, DCNR Bureau of Forestry and the United States Army Corps of Engineers (USACE), and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The combined withdrawal from all surface water sources was limited to a total of 5.54 million gallons and the maximum instantaneous rates and allocations as indicated below:

INTAKE	MAXIMUM INSTANTANEOUS RATE	ALLOCATION NOT TO EXCEED A TOTAL OF
Dyberry Creek	2,850 gpm	2.98 Mg
Shohola Creek	2,850 gpm	2.56 Mg

No other withdrawals are approved by this docket.

c. The docket holder used the water approved in this docket for hydrostatic testing purposes as described in this docket. Any expansion beyond those purposes is not approved by this docket and is subject to DRBC review and approval to the extent required by Section 3.8 of the Compact, the Commission's Rules of Practice and Procedure and/or the Commission's Flood Plain Regulations.

d. The project withdrawals were metered with an automatic continuous recording device that measures to within 5 percent of actual flow. A record of daily withdrawals was maintained, and total usage was submitted to the DRBC and PADEP.

e. Sound practices of excavation, backfill and reseeding were followed to minimize erosion and deposition of sediment in streams from any new facilities or repair related construction.

f. The docket holder discharged hydrostatic testing wastewater as defined in this docket at a maximum rate of 1,500 gpm. Total discharge at the Loop 321 and Loop 323 did not exceed 3.18 Mg and 2.56 Mg, respectively. No other discharges from the project that is the subject of this docket are authorized by this docket and are prohibited unless separately approved by the Commission.

g. The docket holder obtained all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. A complete application must be submitted to the Commission prior to undertaking or conducting any operations or activities that are not approved in this docket and are subject to Commission review under Section 3.8 of the Compact, the Commission's Rules of Practice and Procedure and/or the Commission's Flood Plain Regulations. Prior to any expansion of the pipeline facilities beyond the scope detailed in this approval, the docket holder shall contact the DRBC to determine if DRBC review and approval in accordance with Section 3.8 of the *Compact* or the Commission's regulations is necessary.

i. 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 ensure the proper control, use and management of the water resources of the Basin.

j. 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: June 10, 2015