

300 LINE EXPANSION PROJECT

DRAFT

RESOURCE REPORT NO. 1
GENERAL PROJECT DESCRIPTION

PUBLIC

Tennessee Gas Pipeline Company
1001 Louisiana Street
Houston, Texas 77002

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**RESOURCE REPORT 1 – GENERAL PROJECT DESCRIPTION
SUMMARY OF COMMISSION FILING INFORMATION**

INFORMATION	FOUND IN
Provide a detailed description and location map of the Project facilities (§ 380.12 (c)(1)).	Sections 1.0 and 1.1.2 Figures 1.1-1, 1.1-2a, and 1.1-2l (located in Attachment A) Appendix I Appendix K
Describe any non-jurisdictional facilities that would be built in association with the Project (§ 380.12 (c)(2)).	Section 1.7
Provide current original U.S. Geological Survey (USGS) 7.5-minute series topographic maps with mileposts showing the Project facilities (§ 380.12 (c)(3)).	Appendix I
Provide aerial images or photographs or alignment sheets based on these sources with mileposts showing the Project facilities (§ 380.12 (c)(3)).	Appendix K
Provide plot / site plans of compressor stations showing the location of the nearest noise-sensitive areas (NSA) within 1 mile (§ 380.12 (c)(3,4)).	Appendix L
Describe construction and restoration methods (§ 380.12 (c)(6)).	Section 1.3
Identify the permits required for construction across surface waters (§ 380.12 (c)(9)).	Section 1.6 Table 1.6-1
Provide the names and addresses of all affected landowners and certify that all affected landowners will be notified as required in §157.6(d) (§ 380.12 (c)(10)).	Appendix N Section 1.8

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1.0 INTRODUCTION

Tennessee Gas Pipeline Company (“Tennessee”) is filing an application for a certificate of public convenience and necessity with the Federal Energy Regulatory Commission (“Commission or “FERC”) for the 300 Line Expansion Project (the “Project”) in northern Pennsylvania and northwestern New Jersey. The proposed Project will include construction of approximately 128 miles of 30-inch pipeline consisting of seven separate pipeline loops in northern Pennsylvania, totaling approximately 111 miles, and one pipeline loop in northwestern New Jersey totaling approximately 17 miles. To the extent that it is practicable and feasible, Tennessee proposes to locate the pipeline loops within and adjacent to the right-of-way (“ROW”) associated with its existing 24-inch pipeline designated as the 300 Line. Additionally, as part of the Project, Tennessee proposes to construct two new compressor stations near its existing 300 Line ROW in northwestern Pennsylvania, as well as make improvements and install system upgrades at seven of its existing compressor station facilities in Pennsylvania and New Jersey. Tennessee proposes to begin construction of the Project facilities in the second half of 2010 and to place the facilities in-service by November 2011.

This Resource Report provides a general description of the Project in eight sections. Section 1.1 provides an overview of the Project. Section 1.2 describes the land requirements for construction and operation. Section 1.3 describes construction and restoration procedures and variance requests. Section 1.4 provides information on operation and maintenance procedures for the Project facilities. Section 1.5 describes future plans and abandonment. Section 1.6 identifies agencies contacted and required permits. Section 1.7 describes non-jurisdictional facilities, and Section 1.8 provides information relative to affected landowners. The landowners whose properties will be crossed or affected by the Project are identified in Volume IV, Appendix N of this Environmental Report.

The Project facilities are described geographically in a general west-to-east direction and by category, addressing pipeline facilities first and aboveground facilities second. Milepost (“MP”) notations are used throughout this Environmental Report (“ER”) to identify resources and facilities along the proposed pipeline loop segments and are included on the alignment sheets. The pipeline loops have been assigned separate numbers by Tennessee to provide for easy identification of the loop segments. The Project facilities are summarized in Table 1.1-1.

Figure 1.1-1 provides a graphical overview of the Project. Additionally, U.S. Geological Survey (“USGS”) topographic map excerpts are included within Attachment A to this Resource Report for each of the proposed looping pipeline segments and the new and modified compressor station facilities. All of the detailed maps provided with this ER identify major MPs along the proposed pipeline looping segments.

**TABLE 1.1-1
SUMMARY OF 300 LINE EXPANSION PROJECT FACILITIES**

Facility ID	Facility Type	New/Modified	Length (miles) ^a	Mileposts ^b	County	State
Pipeline Facilities						
Loop 1 (313)	30-inch Loop Pipeline	New	16.9	MP 8.11-313-1D to MP 6.35-314-1	Potter & Tioga	PA
Loop 2 (315)			17.1	MP 1.86-315-1 to MP 8.61-316-1	Tioga	
Loop 3 (317)			22.5	MP 2.01-317-1 to MP 7.87-318-1	Bradford	
Loop 4A (319)			1.3	MP 13.26-318-1 to MP 14.57-318-1	Bradford	
Loop 4 (319)			16.7	MP 2.05-319-1 to MP 9.65-320-1	Bradford & Susquehanna	
Loop 5 (321)			22.2	MP 2.77-321-1 to MP 10.69-322-1	Susquehanna & Wayne	
Loop 6 (323)			14.6	MP 1.51-323-1 to MP 4.81-324-1	Pike	
Loop 7 (325)			17.1	MP 3.61-325-1 to MP 5.78-327-1	Sussex & Passaic	NJ
Total			128.4	-	-	-
Aboveground Facilities						
Station 303	Compressor Station	New	Not Applicable	Not Applicable	Venango	PA
Station 310					McKean	
Station 313					Potter	
Station 315		Tioga				
Station 317		Bradford				
Station 319		Bradford				
Station 321		Susquehanna				
Station 323		Pike				
Station 325		New / Modified			Sussex	NJ

a: Milepost lengths are approximate.

b: Milepost designations measured against Tennessee's existing 300-1 Line 24-inch pipeline.

1.1 PROPOSED FACILITIES

1.1.1 Purpose and Need

Tennessee proposes to construct, install, and operate the Project facilities to increase pipeline capacity to provide additional firm natural gas transportation service into northeast markets, as well as to provide for general system upgrades. The Project, as described further herein, includes the construction, installation, and operation of the following expansion facilities in the states of New Jersey and Pennsylvania: (i) seven pipeline looping segments, (ii) two new compressor stations, and (iii) upgrades to seven existing compressor stations.

In addition to the expansion facilities, Tennessee, as part of the Project, will upgrade compressor units at four of its existing compressor stations where expansion facilities also will be installed. The general system upgrades that Tennessee is proposing to include in the Project will increase system reliability for all of Tennessee's shippers, but will not increase the firm transportation capacity available on Tennessee's 300 Line. Since Tennessee will be installing the expansion facilities at four of the existing compressor stations where the general system upgrades are needed, Tennessee is requesting authority to complete these general system upgrades as part of the Project to minimize impacts and disruptions to the environment and to affected landowners and communities. Additionally, Tennessee will be able to achieve certain economies of scale and efficiencies since certain facilities to be installed as part of the Project will be shared between the expansion portion and the reliability portion of the Project.

Upon completion, the Project will increase natural gas delivery capacity to the northeast region of the United States by approximately 300,000 dekatherms per day and, with the proposed general system upgrades, also will improve system reliability. Tennessee has signed a binding precedent agreement with one shipper, Equitable Energy LLC, for all of the additional firm transportation capacity resulting from the Project's expansion facilities, which demonstrates that the additional firm transportation capacity will be immediately utilized. The Project will also assist with the Commission's goal of providing more natural gas to markets by providing access to diversified natural gas supplies from the Gulf Coast, Appalachian, Rockies, and Marcellus Shale supply areas with deliveries to points located across Tennessee's mainline system, to various interconnections with other pipelines in northern New Jersey, as well as deliveries into jointly-owned local distribution company facilities at an interconnect located in White Plains, New York.

1.1.2 Location and Description of Facilities

1.1.2.1 Pipeline Facilities

The pipeline loops will consist of seven separate looping segments of 30-inch pipeline totaling approximately 128 miles in length and installed generally parallel to Tennessee's existing 300 Line pipeline at a typical offset of 25 feet. The pipeline loops will be located within and directly adjacent to the existing pipeline ROW, to the extent practicable. The seven looping segments vary in length from 14.6 miles to 22.5 miles, and each of the pipeline loops have been assigned separate number designations, as detailed in Table 1.1-1 above. Six of the pipeline looping segments are single discrete loops; however the 319 Loop segment will be constructed in two sections consisting of (i) a 1.3-mile segment of loop pipeline located upstream of Compressor Station 319, and (ii) a 16.7 mile segment located downstream of Compressor Station 319. Table 1.1-2 provides a summary of the individual pipeline loops and provides MP designations within each township, county, and state for each pipeline loop segment.

Project facility information is summarized in Table 1.1-1 above. Figure 1.1-1 provides regional location of Project components. Figures 1.1-2a through 1.1-2g depicts the pipeline route on 7.5-minute USGS topographic map excerpts. These are also shown on full-sized maps in Volume II, Appendix I.

TABLE 1.1-2 PROPOSED PIPELINE FACILITIES FOR THE 300 LINE EXPANSION PROJECT								
Loop ID	Loop Segment	Outside Diameter ("OD")	Milepost ^a		Length (miles)	Township	County	State
			Begin	End				
1	313	30-inches	0.0	0.14	0.14	Allegheny	Potter	PA
			0.14	6.57	6.43	Ulysses		
			6.57	12.95	6.38	Hector		
			12.95	16.9	3.95	Clymer	Tioga	
Loop 313 Subtotal					16.9	-	-	-
2	315	30-inches	0.0	3.44	3.44	Charleston	Tioga	PA
			3.44	11.92	8.48	Richmond		
			11.92	17.14	5.22	Sullivan		
Loop 315 Subtotal					17.1	-	-	-
3	317	30-inches	0.0	6.57	6.57	Granville	Bradford	PA
			6.57	8.16	1.59	West Burlington		
			8.16	12.38	4.22	Burlington		
			12.38	14.30	1.92	Towanda		
			14.30	18.22	3.92	Monroe		
18.22	22.49	4.27	Asylum					
Loop 317 Subtotal					22.5	-	-	-
4A	319	30-inches	0.0	1.3	1.3	Wyalusing	Bradford	PA
4			0.0	2.77	2.77	Tuscarora		
			2.77	10.48	7.71	Auburn	Susquehanna	
			10.48	16.7	6.22	Springville		
Loop 319 Subtotal					18.0	-	-	-
5	321	30-inches	0.0	2.71	2.71	Herrick	Susquehanna	PA
			2.71	4.10	1.39	Uniondale		
			4.10	4.48	0.38	Clifford		
			4.48	6.49	2.01	Pleasant Mount	Wayne	
			6.49	12.38	5.89	Clinton		
			12.38	17.58	5.20	Dyberry		
			17.58	17.82	0.24	Bethany		
			17.82	19.94	2.12	Honesdale		
19.94	22.16	2.22	Berlin					
Loop 321 Subtotal					22.2	-	-	-
6	323	30-inches	0.0	6.26	6.26	Lackawaxen	Pike	PA
			6.26	13.67	7.41	Shohola		
			13.67	14.58	0.91	Milford		
Loop 323 Subtotal					14.6	-	-	-
7	325	30-inches	0.0	1.21	1.21	Wantage	Sussex	NJ
			1.21	9.92	8.71	Vernon	Passaic	
			9.92	16.64	6.72	West Milford		
			16.64	17.09	0.45	Ringwood		
Loop 325 Subtotal					17.1	-	-	-
PROJECT TOTAL					128.4	-	-	-

a: Milepost designations measured against the individual proposed loop pipeline facility.

1.1.2.2 Aboveground Facilities

This section details information related to all of the associated aboveground facilities required for the Project. These facilities include new and modified compressor stations, new main line valves (“MLVs”), and other pipeline appurtenances. Table 1.1-3 provides a summary, by location, of all new and modified compressor station facilities associated with the Project. Table 1.1-4 provides a summary and location of all new appurtenant aboveground facilities including MLVs, a meter station modification, and internal inspection facilities (e.g., pig launchers and receivers). These facility locations are shown on 7.5-minute USGS topographic map excerpts designated as Figures 1.1-2h through 1.1-2p located in Attachment A to the resource report and as full-sized maps in Volume II, Appendix I.

TABLE 1.1-3 PROPOSED COMPRESSOR STATIONS AND MODIFICATIONS FOR THE 300 LINE EXPANSION PROJECT					
Facility	New / Modified	Horsepower		Township	County / State
		New	Replaced		
Station 303 Compressor	New	15,000	-	Cranberry	Venango / PA
Station 310 Compressor		15,400	-	Sergeant	McKean / PA
Station 313 Compressor	Modified	5,280	1,320	Hebron	Potter / PA
Station 315 Compressor		5,700	9,300	Charleston	Tioga / PA
Station 317 Compressor		Upgrade compressor on existing unit		Troy	Bradford / PA
Station 319 Compressor		Restage two existing compressor units		Tuscarora	Bradford / PA
Station 321 Compressor		4,100	10,000	Clifford	Susquehanna / PA
Station 323 Compressor		Add filter separator (new)		Lackawaxen	Pike / PA
Station 325 Compressor		11,220	9,400	Wantage	Sussex / NJ
Project Total			56,700	30,020	-

**TABLE 1.1-4
PROPOSED APPUTENANT ABOVEGROUND FACILITIES FOR THE
300 LINE EXPANSION PROJECT**

Loop ID	Loop Segment	Facility	New / Modified	Approximate Milepost^a	Township	County / State
1	313	Pig Launcher	New	0.0	Allegany	Potter / PA
		MLV 314-2	New	10.5	Hector	Potter / PA
2	315	MLV 316-2	New	8.5	Richmond	Tioga / PA
		Pig Receiver	New	17.1	Sullivan	Tioga / PA
3	317	MLV 318-2	New	14.6	Towanda	Bradford / PA
		Pig Receiver	New	22.5	Asylum	Bradford / PA
4	319	Pig Launcher	New	0.0	Tuscarora	Bradford / PA
		MLV 320-2	New	16.7	Springville	Susquehanna / PA
5	321	MLV 322-2	New	11.5	Clinton	Wayne / PA
		Pig Receiver	New	22.2	Berlin	Wayne / PA
6	323	Pig Launcher	New	0.0	Lackawaxen	Pike / PA
		MLV 324-2A	New	9.8	Shohola	Pike / PA
		Pig Receiver	New	14.6	Milford	Pike / PA
7	325	MLV 326-2	New	4.2	Vernon	Sussex / NJ
		MLV 327-2	New	11.4	West Milford	Passaic / NJ
		MLV 327-2A	New	14.7	West Milford	Passaic / NJ
		Pig Receiver	New	17.1	Ringwood	Passaic / NJ

a: Milepost designations measured against the individual proposed loop pipeline facility.

1.1.2.2.1 Compressor Stations

As part of the Project, Tennessee proposes to construct two new compressor stations in northwestern Pennsylvania and to modify facilities at seven existing compressor station facilities located along the 300

Line. The two new compressor stations and the modifications to the seven existing compressor stations will add a total of approximately 56,700 horsepower (“hp”) to Tennessee’s system.

Each of the two new compressor station facilities located in Pennsylvania will be capable of providing approximately 15,000 hp of compression to Tennessee’s 300 Line system (for a total of 30,400 hp), with the remaining approximately 26,300 hp being attained through equipment additions, expansions, upgrades, re-staging, and/or replacement at existing compressor stations. The replacement of selected gas engines(s) and turbine drivers is proposed to meet additional gas demand, improve reliability and efficiency, and to reduce environmental impact. Table 1.1-3 provides information on the new compressor stations and modifications to existing compressor stations.

Tennessee proposes to design and operate the proposed new compressor stations using the same or similar techniques that have been applied successfully on its existing compressor stations in Pennsylvania and New Jersey. Key elements of the new Station 303 and Station 310 compressor unit designs are the installation of gas turbines incorporating Best Available Control Technology (“BACT”). The new compressor stations will be stand-alone facilities capable of full-time operation and occupancy. The stations will also be designed for unattended operation via remote control. Each station will have secured access with all-weather roads. The new compressor stations will require municipal electric service and domestic water and/or water wells with necessary equipment to provide potable and non-potable service where water is not readily available. Emergency generators and uninterruptible power supplies for critical services will also be included. Each site will be designed to manage hazardous waste containment and disposal. An emergency shutdown system (“ESD”) and blow-down silencer will also be installed at each new station. Table 1.1-3 provides a summary of the proposed new and modified compressor station facilities associated with the Project. Compressor station locations are depicted on 7.5-minute USGS topographic map excerpts (Figures 1.1-2h through 1.1-2p in Attachment A of this resource report) and on full-sized maps in Volume II, Appendix I.

Station 303 Compressor (New)

Tennessee proposes to install one 15,000 (nominal) hp turbine driven centrifugal compressor at a new compressor station to be located in Cranberry Township, Venango County, Pennsylvania. The driver for this compressor unit will be fueled with natural gas and will be equipped with a “lean pre-mix” dry, low nitrogen oxide (“NOx”) combustors to limit NOx, carbon monoxide (“CO”), and particulate matter (“PM”) emissions to BACT levels. The auxiliary facilities will include the compressor building and valve shed, each of which will be constructed of a rigid steel frame with sheet metal roofs and walls. A controls building and auxiliary building will house station controls and communications equipment as well as an emergency electrical power generator. The proposed facilities will also include parking and access areas, and a fence enclosure. Figure 1.1-2h provides a USGS topographic map excerpt of the location of the new Station 303 compressor station.

Station 310 Compressor (New)

Tennessee proposes to install one 15,400 (nominal) hp, turbine driven centrifugal compressor at a new compressor station to be located in Sergeant Township, McKean County, Pennsylvania. The driver for this compressor unit will be fueled with natural gas and will be equipped with a “lean pre-mix” dry, low nitrogen oxide (“NOx”) combustors to limit NOx, CO, and PM emissions to BACT levels. The auxiliary facilities will include the compressor building and valve shed, each of which will be constructed of a rigid steel frame with sheet metal roofs and walls. A controls building and auxiliary building will house station

controls and communications equipment as well as an emergency electrical power generator. The facilities will also include parking and access areas, and a fence enclosure. Figure 1.1-2i provides a USGS topographic map excerpt of the location of the new Station 310 compressor facility.

Station 313 Compressor (Modified)

Tennessee proposes to install one 6,600 hp electric motor driven reciprocating compressor at its existing Station 313 located in Hebron Township in Potter County, Pennsylvania. This new compressor unit will replace an existing 1,320 hp compressor unit and will add 5,280 hp to the station. Figure 1.1-2j provides a USGS topographic map excerpt of the location of the Station 313 compressor facility.

Station 315 Compressor (Modified)

Tennessee proposes to install one 15,000 hp natural gas driven centrifugal compressor unit at its existing Station 315 located in Delmar Township, Tioga County, Pennsylvania. This new unit will replace an existing 9,300 hp unit and add 5,700 hp to the station. The new unit will be placed in the existing compressor building that currently houses the gas turbine-driven centrifugal compressor unit being replaced. Figure 1.1-2k provides a USGS topographic map excerpt of the location of Station 315 compressor facility.

Station 317 Compressor (Modified)

Tennessee proposes to replace a centrifugal compressor at its Station 317 located in Troy Township, Bradford County, Pennsylvania. The new compressor will use the existing electric motor drive for the compressor unit that is being retired. The existing unit is rated for 13,000 hp, and no increase in hp is proposed. Figure 1.1-2l provides a USGS topographic map excerpt of the location of Station 317 compressor facility.

Station 319 Compressor (Modified)

Tennessee proposes to re-stage two existing centrifugal compressor units at its Station 319 located in Tuscarora Township, Bradford County, Pennsylvania. Figure 1.1-2m provides a USGS topographic map excerpt of the location of Station 319 compressor facility.

Station 321 Compressor (Modified)

Tennessee proposes to replace three compressor drivers and re-stage the associated compressor units at its existing Station 321 located in Clifford Township, Susquehanna County, Pennsylvania. The existing gas turbine engines will be replaced with new gas turbines rated at 4,700 hp each. The engine replacements will result in a total installation of 14,100 hp within the existing facility footprint, which represents a net increase of 4,100 hp for the station. The increased horsepower will result from the installation of the closest size of currently available, marketed and supported gas turbines. Figure 1.1-2n provides a USGS topographic map excerpt of the location of Station 321 compressor facility.

Station 323 Compressor (Modified)

Tennessee proposes to install an inlet gas filter-separator at its Station 323 located in Lackawaxen Township, Pike County, Pennsylvania. Figure 1.1-2o provides a USGS topographic map excerpt of the location of Station 323 compressor facility.

Station 325 Compressor (Modified)

Tennessee proposes to replace two compressor units, totaling 9,400 hp, with two new 10,310 hp natural gas driven turbine compressor units at its Station 325 located in Sussex County, NJ. The new compressor units will be installed in the existing compressor building. The installation of these units replaces existing hp and increases station power by 11,220 hp. Figure 1.1-2p provides a USGS topographic map excerpt of the location of Station 325 compressor facility.

1.1.2.2.2 Main Line Valves

Each pipeline looping segment will require the installation of new 30-inch main line valve assemblies. The MLV assemblies will typically be incorporated into a pig launcher and receiver aboveground facilities enclosure with existing MLV sites located along the existing 300 Line 24-inch pipeline to the extent practicable. Table 1.1-4 provides a summary and location of all appurtenant aboveground facilities associated with the Project. Additionally, all appurtenant aboveground facilities, including MLV locations, have been identified on the applicable loop segment USGS topographic map excerpt.

1.1.2.2.3 Pig Launchers / Receivers

To comply with Tennessee's integrity management program, the Project has been designed to incorporate aboveground facilities to accommodate internal inspection of the proposed pipeline loops. The seven main loop segments will be installed with either a launcher or receiver, as appropriate. The 1.3-mile loop segment associated with the 319 Loop (also referred to as Loop 4A) will not have a launcher or receiver installed based on its short length and lack of high consequence areas. The launcher/receiver facilities will consist of aboveground 36-inch trap barrels with 30-inch trap valves, 24-inch side valves, and 8-inch kicker valves, and other miscellaneous safety and isolation piping and valves. The launcher and receiver facilities will consist of discrete aboveground enclosures installed within or immediately adjacent to Tennessee's existing ROW and will include a gravel or grassed base, site access, chain-link fence enclosure for security purposes, and identification and emergency signage. Table 1.1-4 provides a summary including location of all appurtenant aboveground facilities associated with the Project. All appurtenant aboveground facilities, including pig launcher and receiver locations, have been identified on the applicable loop segment USGS topographic map excerpt.

1.1.3 Location Maps, Detailed Site Maps, and Plot/Site Maps

The regional location of the Project is illustrated in Figure 1.1-1. The Project facilities, including pipeline looping facilities, compressor stations, staging yards/pipe yards, and access roads, are shown on the full-sized USGS 7.5-minute topographic quadrangle maps located in Volume II - Appendix I. Also, 11 x 17-inch topographic map excerpts with site locations are provided in Figures 1.1-2a through 1.1-2p. Plot plans for compressor station facilities are provided in Volume III - Appendix L. Aerial alignment sheets are provided as full-sized drawings in Volume II - Appendix K.

1.2 LAND REQUIREMENTS

The construction workspace (including additional temporary workspace (“ATWS”), permanent ROW, access roads, cathodic protection, and staging areas) for the Project will total approximately 1,843 acres (See Table 1.2-1). Operation of the Project facilities will require approximately 1,020 acres that will be maintained as permanent ROW (See Table 1.2-1). See Table 1.2-1 for a summary of all Project-related land requirements including temporary access roads and staging areas. The photo-based alignment sheets in Volume II - Appendix K depict the location and configuration of all temporary and permanent construction workspace and access roads required for the Project.

TABLE 1.2-1 SUMMARY OF LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT		
Facility	Land Affected During Construction^a (acres)	Land Affected During Operation^b (acres)
Pipeline	1,592	1,015
Aboveground Facilities	114	73
Access Roads	To be Determined	To be Determined
Staging Areas/ Pipe Yards	245	0
Total	1,951	1,088

^a Based on the extent of permanent ROW, temporary and additional temporary workspace.

^b Based on the extent of the area that will be maintained post construction.

1.2.1 Pipeline Facilities

The construction work area (the footprint of all disturbance during construction) for the pipeline facilities is estimated at 1,592 acres. The construction work area consists of temporary workspace (“TWS”) and permanent ROW required for the approximately 128 miles of new pipeline loops. The construction work area also includes ATWS, staging, and cathodic protection areas, access roads, pipe yards, and contractor yards. The land required for the ongoing operation of the Project (permanent ROW) is approximately 1,015 acres. Typically, pipeline construction will require up to 75 feet of TWS (equivalent to the Land Affected During Construction column in Table 1.2-1) abutting the existing ROW. Tables 1.2-2 through 1.2-8 summarize land acreage requirements by loop segment for construction and operation of the Project facilities. A detailed discussion of construction and operational (permanent) acreage requirements by land use type is presented in Resource Report 8. Pipeline ROW workspace configurations and dimensions are indicated on the aerial alignment sheets in Volume II – Appendix K.

Tennessee proposes to use the typical construction ROW configurations listed in Tables 1.2-2 through 1.2-8 below. The construction workspace consists of the combinations of existing permanent ROW, proposed permanent ROW, and proposed TWS shown in the tables below (please also refer to typical ROW configuration drawings).

Vegetation within the permanent ROW will be maintained in an herbaceous state, except in wetlands and adjacent to perennial streams, where maintenance clearing of woody vegetation will be limited to a ten-foot-wide strip centered directly over the pipeline. Here, the remaining temporary and permanent corridor will revert to its pre-construction land use/land cover once construction is complete. Crop production will be allowed to continue in agricultural areas. Typical cross sections for pipeline construction/operation and topsoil segregation are shown in Volume II – Appendix E.

**TABLE 1.2-2
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
313 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
1	Pipeline ^e	Figure 1-1-ROW Figure 1-2-ROW		89,231 feet	211	128
	Additional Temporary Workspace	N/A	N/A ^d	20 sites	11	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
313 Loop Total					257	128

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-3
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
315 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
2	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		90,594 feet	220	153
	Additional Temporary Workspace	N/A	N/A ^d	19 sites	16	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
315 Loop Total					271	153

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-4
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
317 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
3	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		118,740 feet	276	187
	Additional Temporary Workspace	N/A	N/A ^d	63 sites	6	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
317 Loop Total					317	187

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-5
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
319 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
4	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		95,049 feet	225	147
	Additional Temporary Workspace	N/A	N/A ^d	47 sites	9	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 sites	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
319 Loop Total					269	147

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-6
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
321 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
5	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		116,975 feet	273	185
	Additional Temporary Workspace	N/A	N/A ^d	82 sites	9	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
321 Loop Total					317	185

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-7
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
323 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
6	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		76,999 feet	182	114
	Additional Temporary Workspace	N/A	N/A ^d	37 sites	7	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
323 Loop Total					224	114

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

**TABLE 1.2-8
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
325 LOOP PIPELINE FACILITIES**

Loop ID	Facility	ROW Cross-Section ^a		Length (Linear Feet) / Number of Sites	Land Affected During Construction ^b (acres)	Land Affected During Operation ^c (acres)
		Drawing Number	Mileposts			
7	Pipeline	Figure 1-1-ROW Figure 1-2-ROW		90,238 feet	204	101
	Additional Temporary Workspace	N/A	N/A ^d	53 sites	4	0
	Cathodic Protection System	N/A	To be determined	To be Determined	To be Determined	To be Determined
	Pipe Yards/ Contractor Yards	N/A	N/A	1 site	35	0
	Access Roads	N/A	N/A ^d	To be Determined	To be Determined	To be Determined
325 Loop Total					243	101

^a See Volume II - Appendix E for Typical ROW Configurations.

^b Construction ROW is based on the extent of permanent, temporary, and additional temporary workspace.

^c Permanent ROW is based on the extent of the area that will be maintained post construction.

^d See Resource Report 8 for detailed locational information of Additional Temporary Workspace areas and Access Roads.

^e Pipeline includes temporary construction workspace and permanent ROW.

1.2.2 Aboveground Facilities

The aboveground facilities proposed for the Project include both minor aboveground piping associated with valve sites and internal inspection, and major aboveground facilities, including new and modified existing compressor stations. The two new compressor stations are located in Venango and McKean Counties, Pennsylvania. Land sites adjacent to the existing 300 Line ROW are being acquired for installation of the two new compressor stations. The proposed modifications to the seven existing compressor stations will be made either in the existing compressor station buildings or within the developed footprint at the compressor station properties. These major facilities require larger areas to accommodate not only the physical structure of each facility but also to facilitate construction of the facilities, including equipment and materials storage and lay-down areas. The land requirements for each new and modified compressor station facility are summarized in Table 1.2-9.

The minor aboveground facilities proposed for the Project, including new main line valves and internal inspection facilities, require smaller areas for development and can typically be constructed within the existing ROW limits. Where the existing ROW area would not accommodate installation of the minor aboveground facilities associated with the Project, Tennessee either negotiated an easement for additional land adjacent to the existing ROW or purchased property traversed by the existing pipeline ROW for

construction of the facilities. Table 1.2-10 provides a summary of the land requirements for construction and operation of minor appurtenant aboveground facilities for the Project.

**TABLE 1.2-9
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
COMPRESSOR STATION FACILITIES**

Facility	New / Modified	Approximate Milepost	Township	County / State	Land Affected During Construction ^a (acres)	Land Affected During Operation ^b (acres)
Station 303 Compressor	New		Cranberry	Venango / PA	30	25
Station 310 Compressor			Sergeant	McKean / PA	50	40
Station 313 Compressor	Modified	Not Applicable	Hebron	Potter / PA	10	2.0
Station 315 Compressor		Not Applicable	Delmar	Tioga / PA	5.0	0.25
Station 317 Compressor		Not Applicable	Troy	Bradford / PA	3.0	0.15
Station 319 Compressor		Not Applicable	Tuscarora	Bradford / PA	3.0	0.15
Station 321 Compressor		Not Applicable	Clifford	Susquehanna / PA	3.0	0.15
Station 323 Compressor		Not Applicable	Lackawaxen	Pike / PA	1.0	0.15
Station 325 Compressor		Not Applicable	Wantage	Sussex / NJ	3.0	0.5
Project Total					108	68

- a: Land Affected During Construction is based on the extent of temporary workspace, additional temporary workspace and permanent right-of-way.
- b: Land Affected During Operation is based on the extent of the land that will be maintained during operation of the aboveground facilities.

**TABLE 1.2-10
LAND REQUIREMENTS FOR THE 300 LINE EXPANSION PROJECT
APPURTENANT ABOVEGROUND FACILITIES**

Loop ID	Loop Segment	Facility	Approximate Milepost	Township	County / State	Land Affected During Construction ^a (acres)	Land Affected During Operation ^b (acres)
1	313 Loop	Pig Launcher	0.0	Allegany	Potter / PA	0.6	0.23
		MLV 314-2	10.5	Hector	Potter / PA	0.1	0.01
2	315 Loop	MLV 316-2	8.5	Richmond	Tioga / PA	0.1	0.01
		Pig Receiver	17.2	Sullivan	Tioga / PA	0.6	0.23
3	317 Loop	MLV 318-2	14.6	Towanda	Bradford / PA	0.1	0.01
		Pig Receiver	22.5	Asylum	Bradford / PA	0.6	0.23
4	319 Loop	Pig Launcher	0.0	Tuscarora	Bradford / PA	0.6	0.23
		MLV 320-2	16.7	Springville	Susquehanna / PA	0.1	0.01
5	321 Loop	MLV 322-2	11.5	Clinton	Wayne / PA	0.1	0.01
		Pig Receiver	22.2	Berlin	Wayne / PA	0.6	0.23
6	323 Loop	Pig Launcher	0.0	Lackawaxen	Pike / PA	0.6	0.23
		MLV 324-2A	9.8	Shohola	Pike / PA	0.1	0.01
		Pig Receiver	14.6	Milford	Pike / PA	0.6	0.23
7	325 Loop	MLV 326-2	4.2	Vernon	Sussex / NJ	0.1	0.01
		MLV 327-2	11.4	West Milford	Passaic / NJ	0.1	0.01
		MLV 327-2A	14.7	West Milford	Passaic / NJ	0.1	0.01
		Pig Receiver	17.1	Ringwood	Passaic / NJ	0.6	0.23
Project Total						5.7	1.9

^a: Land Affected During Construction is based on the extent of temporary workspace, additional temporary workspace, and permanent right-of-way.

^b: Land Affected During Operation is based on the extent of the land that will be maintained during operation of the aboveground facilities.

1.2.3 Staging Area and Pipe Yards

Locations in the vicinity of the pipeline loops have been identified for potential use as staging areas, pipeyards, and/or contractor yards during construction of the Project. These areas will be used for equipment, pipe, and material storage, as well as temporary field offices and pipe preparation/field assembly areas. Tennessee is currently negotiating with landowners to secure access to some of these locations for use during Project construction; site selection and acquisition will continue throughout the planning and permitting stages of the Project. Please refer to Resource Report 8 for additional information regarding the pipeyards/staging areas associated with the Project. Locations of proposed staging areas, pipeyards, and contractor yards are included on both the USGS topographic map excerpts included as Attachment A to the resource report as well as the full-size USGS topographic maps in Appendix I located in Volume II of this ER.

1.2.4 Access Roads

Tennessee will use existing public roadways to access the construction ROW to the extent possible. The identification of locations, configurations, and acquisition of the access roads for each of the pipeline loop segments will continue throughout the planning and permitting stages of the Project. The access roads to be utilized during Project construction will be identified in the Final ER. Please refer to Resource Report 8 for summary tables providing a description of each access road including information on milepost location and length. Locations of proposed access roads are included on both the USGS topographic map excerpts as well as the full-size USGS topographic maps located in Volume II – Appendix I of this ER.

1.2.5 Additional Temporary Workspace

ATWS areas are typically required at road, railroad, wetlands, and waterbody crossing locations. The configuration of ATWS areas are based upon site-specific conditions and will vary in accordance with the construction methodology and crossing type. ATWS land requirements are summarized for each pipeline loop in Tables 1.2-2 to 1.2-8. A complete list of ATWS locations by milepost is provided in Resource Report 8.

1.3 CONSTRUCTION PROCEDURES

The Project facilities will be designed, constructed, tested, operated, and maintained to conform with federal, state, and local requirements including 49 CFR Part 192, “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards” and 18 CFR Section 380.15, “Siting and Maintenance Requirements”. In addition, unless otherwise authorized through a variance granted by FERC, Tennessee will comply with the Commission’s Upland Erosion Control, Revegetation and Maintenance Plan (the “Plan”, January 17, 2003 version) and the Commission’s Wetland and Waterbody Construction and Mitigation Procedures (the “Procedures”, January 17, 2003 version) as contained in Appendix A located in Volume II of the ER. Proposed Project-specific variances to the Plan and Procedures are detailed in Resource Report 8. A Spill Prevention Control and Countermeasure (“SPCC”) Plan (Appendix B), an Unanticipated Discovery Plan for cultural resources (Appendix C), a Waste Management Plan (Appendix D), and typical construction workspace layouts (Appendix E) are also provided in Volume II and comprise Tennessee’s Construction Best Management Practices (“BMPs”) for the Project.

1.3.1 Pipeline Construction

The general procedures that will be followed for the Project are described in this section. Tennessee will use conventional techniques for buried pipeline construction and will follow the requirements set forth in the Construction BMPs, including the Commission’s Plan and Procedures, to ensure safe, stable, and reliable transmission facilities consistent with Commission and U.S. Department of Transportation (“DOT”) specifications. At a minimum, Tennessee will perform the following procedures:

- Marking the corridor;
- Clearing and grading;
- Trenching;

- Stringing;
- Pipe preparation (bending, welding, X-ray, weld coating and coating repair) and lowering in;
- Backfilling and grade restoration;
- Hydrostatic testing and tie-ins; and
- Cleanup and restoration.

The above listed procedures will typically follow in the sequence listed. Areas requiring special construction techniques may include: road or utility crossings, waterbodies and wetlands, unusual topographies such as unstable soils and trench conditions, residential or urban area, agricultural area, areas requiring rock removal and permanent recreation facilities.

1.3.1.1 Marking the Corridor

Land survey crews marked the centerline of Tennessee's existing 300 Line pipeline with stakes in the Fall of 2008. The center line has been marked at frequent intervals as well as at known crossings of foreign lines and utilities, at road crossings and at points of inflection ("PI"). Additionally, avoidance areas including wetland boundaries, cultural resource sites and rare species habitat, as applicable, will be marked with appropriate fencing, signage and/or flagging based on environmental and archaeology surveys and environmental permit conditions.

1.3.1.2 Clearing, Grading, and Fencing

The construction corridor will be cleared and graded to remove brush, trees, roots, and other obstructions such as large rocks and stumps. Non-woody vegetation may be mowed to ground level. Temporary fences and gates will be installed as needed. No cleared material will be placed within wetland areas.

Immediately following clearing of the construction ROW, Tennessee will install appropriate temporary erosion controls. Typically, staked straw bales or silt fence barriers are positioned along the limit of wetland boundaries within the construction workspace. The Environmental Inspector ("EI") will monitor field conditions daily to ensure that appropriate erosion and sedimentation control measures are maintained until the construction work space is fully stabilized.

Grading of the construction workspace will allow the movement of heavy equipment and the safe passage of work crews. Grading will include removing rock outcrops, tree stumps, ridges and topographic irregularities. Generally, machinery will operate on one side of the trench (working side) with excavated materials stockpiled on the other (non – working side).

As appropriate, the clearing and grading operations will incorporate special construction procedures to minimize the amount of vegetation removed from stream banks and slopes, prevent undue disturbance of the soil profile, restore the original contours of the natural ground and prevent topsoil erosion. To minimize impact to the soil profile on agricultural lands, topsoil will be segregated from subsoil across the entire width of the ROW during trenching and will remain segregated during construction to avoid loss due to mixing with subsoil material. Upon the completion of backfilling operations, the topsoil will be properly replaced over the graded area.

Trees and other woody vegetation will be properly disposed off-site. Grading activities will be scheduled to minimize the time between initial clearing operations and the actual installation of pipe. Access to the construction corridor will normally be obtained via public roads that intersect the ROW. Permission will be obtained from landowners for the use / upgrade of access roads across their property to the construction corridor and also for cutting trees and erecting temporary gates along access roads where necessary.

1.3.1.3 Trenching

In most areas characterized by normal soils, the trench for the pipeline is excavated by crawler-mounted, rotary wheel-type trenching machines or track-mounted excavators. The trench generally will be approximately 14 inches wider than the diameter of the pipe and of sufficient depth to allow for a minimum of 36 inches of cover to the top of the pipe in accordance with DOT regulations pursuant to the Natural Gas Pipeline Safety Act of 1968. Landowner requests or permitting requirements may dictate greater depth.

Crossing of foreign pipelines will generally require the pipeline to be buried at greater depths depending upon the depth of the foreign pipeline. A minimum of 12 inches of clearance will be maintained when crossing foreign pipelines, utilities or other structures. Pipeline burial depths in areas requiring special construction techniques through rock will be in accordance with DOT requirements of 49 CFR Part 192. Prior to the commencement of construction activities, the “Dig-Safe” call system for the states of Pennsylvania and New Jersey, as well as the national “811” call system, will be contacted to have underground utilities and foreign pipelines identified and marked. Trenching in the vicinity of these foreign utilities will begin only after completing the appropriate notification procedures.

In accordance with the Commission’s Plan and Procedures, measures will be employed to minimize erosion during trenching operations and construction activities. Measures also will be taken to minimize the free flow of water into the trench and through the trench into waterbodies. Compacted earth for temporary trench breakers and sandbags for permanent trench breakers may be installed within the trench to reduce erosion.

1.3.1.4 Pipe Stringing

The stringing operation involves moving the pipe into position along the prepared ROW. Pipe will be delivered to the Project area’s pipeline storage areas typically by truck and will then moved by truck from the pipeline storage areas to the construction zone, where it will be placed along the ROW in a continuous line in preparation for subsequent lineup and welding operations. Individual joints of pipe will be strung along the ROW parallel to the centerline and arranged so they are easily accessible to construction personnel. The amount of pipe necessary for stream or road crossings will be stockpiled in pipeline storage areas in the vicinity of each crossing. Stringing activities will be coordinated with the advance of the trenching and pipe laying crews to minimize the potential impact to the resources.

1.3.1.5 Pipe Preparation and Lowering-In

Each welder will be qualified in accordance with federal regulations using approved welding procedures. The pipe joints will be welded together using qualified welding procedures. Qualified inspectors will perform inspection of the pipe welding. Bending, welding and coating in the field will comply with DOT regulations, 49 CFR Part 192.

The pipe will be protected with an external coating designed to protect the pipe from corrosion. Except for a small area at both ends of each pipe joint, this coating is generally applied at the pipe mill before shipment to the site. The weld locations are coated in the field with similar or compatible materials. The pipe coating is inspected for defects and repaired, if necessary, prior to backfilling.

Once the pipeline has been welded together, coated and inspected, the pipe is lowered into the trench. If the bottom of the trench is rocky, methods to protect the pipe will be used, including the possible use of sandbags or support pillows at designated intervals along the trench. Trench dewatering may be required in certain locations to prevent the pipe from floating and also to perform certain limited activities in the trench. Trench dewatering will be performed in accordance with the Commission's Procedures.

1.3.1.6 Backfilling and Grade Restoration

After lowering the pipe into the trench, the trench will be backfilled. Backfill usually consists of the material originally excavated from the trench; however, in some cases, additional backfill from other sources may be required. Any excess excavated materials or materials unsuitable for backfill will be spread evenly over the construction corridor or disposed of in accordance with applicable regulations. In areas where topsoil has been segregated, the subsoil will be placed in the trench first and then the topsoil will be placed over the subsoil. Backfilling will occur to approximate grade. However, a soil crown may be placed above the trench at the discretion of the Tennessee inspector to accommodate any future soil settlement.

1.3.1.7 Clean-up and Restoration

After the completion of backfilling, disturbed areas will be graded, and any remaining trash and debris will be properly disposed of in compliance with federal, state, and local regulations. The construction corridor will be protected through the implementation of erosion control measures including site specific contouring, permanent slope breakers, mulching, and reseeded or sodded with soil-holding vegetation. Contouring will be accomplished using acceptable excess soils from construction. If sufficient soils are not available, additional soil will be obtained from approved sources.

Tennessee will restore the construction workspace in accordance with the Commission's Plan, applicable seed mix requirements from the National Resource Conservation Service or applicable state and county Soil and Water Conservation Districts and relevant landowner agreements (See Appendix A located in Volume II of the ER).

1.3.1.8 Hydrostatic Testing and Tie-Ins

Hydrostatic testing procedures are described in Section VII of the Commission's Procedures (See Appendix A located in Volume II of the ER). Tennessee will seek coverage under the Pennsylvania National Pollutant Discharge Elimination System ("PA NPDES") General Permit (PAG 10) and New Jersey Pollutant Discharge Elimination System ("NJ NPDES") General Permit (NJ0132993) for hydrostatic test water discharge. Hydrostatic test water will be discharged within an upland area through a filter structure. The pipeline will be tested hydrostatically in accordance with the Federal Safety Standards of the DOT, 49 CFR Part 192. The pipeline will be filled with water and maintained at or above the requisite operating pressure throughout the test. After the completion of a satisfactory test, the water will be discharged via a filter fabric containment structure to a vegetated upland area. The discharge

rate of the test water will be regulated using valves and energy dissipation devices to prevent erosion. Tie-in locations will be cleaned and restored after hydrostatic testing. Please refer to Resource Report 2 for additional information regarding hydrostatic pressure testing of the pipeline, including anticipated water volumes for each loop.

1.3.1.9 Specialized Construction Procedures

Dependent upon site conditions, Tennessee may implement the following special pipeline construction methods in residential, agricultural, and environmentally sensitive areas.

1.3.1.9.1 Rugged Topography

Rugged topography is present along portions of several loop sections (See Resource Report 7 for specific locations of shallow depth to bedrock). Permanent trench breakers consisting of sandbags, gravel, or cement filled sacks will be installed in the ditch over and around the pipe in areas of slope with high erosion potential. Trench plugs, usually composed of compacted earth or other suitable low-permeable material will be used to isolate wet areas and to minimize channeling of groundwater along the ditch line.

When side slopes that require special construction are encountered, the following techniques will be used. During grading, the up-slope side of the pipeline ROW will be cut. The material removed from the cut will be used to fill the down-slope edge of the ROW to provide a safe and level surface from which to operate the heavy equipment. During grade restoration, the spoil is placed back in the cut and compacted. Any springs or seeps found in the cut will be carried down-slope through PVC pipe and / or gravel French drains installed as part of the cut restoration.

In the areas of construction where the slope exceeds 30 degrees or more, a special means of manipulating the construction equipment must be utilized. The preferred method will be “winching” the equipment. This process consists of placing and anchoring a tractor at the top of the slope and using a winch to manipulate the equipment up and down the slope.

1.3.1.9.2 Residential Areas

In general, Tennessee will install temporary exclusion fencing along the edge of the construction workspace in residential areas to ensure that equipment and excavated materials remain in the workspace. Tennessee will attempt to maintain a minimum distance of 25 feet between the edge of the construction workspace and any adjacent residence. Site specific drawings will be developed for occupied residential buildings within 25 feet of the construction workspace. Tennessee will restore all lawn areas and landscaping within the workspace, consistent with the requirements of the Commission’s Plan immediately after backfilling the trench. Additionally, Tennessee will test water wells within 50 feet of the construction workspace, if any, both before and after construction.

To ensure that the trench is backfilled immediately after pipeline installation, Tennessee will use a typical pipeline construction sequence in which the pipeline installation crew is followed by a separate backfill crew. Tennessee will require its contractor, by contractual agreement, to backfill trenches in residential areas as soon as practical after the installation of the pipeline. The minimal length of each construction spread will not require construction crews be separated by significant distances during pipeline construction. Pipeline construction crews will be in close proximity to one another and able to efficiently communicate during the entire construction phase of the Project.

Tennessee has prepared a Public Participation Plan for the Project, which was filed with the Commission on October 7, 2008 as Appendix F to Tennessee's request to use the Commission's pre-filing procedures for the Project. The Public Participation Plan includes publicly-noticed open houses, presentations, and the publishing of information on El Paso Corporation's Project website. Open houses will be held in the Project area in December 2008 and January 2009 to provide information to the community and to receive comments from the residents. As part of the open house process, Tennessee will provide information regarding the Commission's regulatory process. The following provides the schedule of open houses that will be held for the Project:

- December 2, 2008 – McKean County, Pennsylvania
- December 3, 2008 – Potter County, Pennsylvania
- December 4, 2008 – Venango County, Pennsylvania
- December 8, 2008 – Tioga County, Pennsylvania
- December 9, 2008 – Bradford County, Pennsylvania
- December 10, 2008 – Susquehanna County, Pennsylvania
- December 11, 2008 – Pike / Wayne Counties, Pennsylvania
- January 5, 2009 – Sussex County, New Jersey
- January 7, 2009 – Passaic County, New Jersey

In addition to the community outreach meetings and the open houses, Tennessee's community outreach program includes the following elements:

- Flyers announcing open houses mailed to affected parties;
- Newspaper advertisements of open houses placed in newspapers of general circulation in the affected area;
- Newspaper advertisement prior to commencement of construction, which will be placed in those same publications;
- Notification to businesses potentially affected by construction;
- Designation of a point of contact for stakeholder communication;
- A Project "800" telephone number for public inquiries; and
- A Project website with periodic updates of relevant information.

1.3.1.9.3 Agricultural Lands

To preserve soil productivity in agricultural lands, topsoil will be segregated and stored separately from subsoil during construction. During the backfilling and restoration phases, topsoil will be replaced, and any stones greater than four inches in diameter uncovered during construction will be removed or handled in accordance with individual landowner agreements. Any drain tiles damaged during construction will be repaired or replaced, and a crop-monitoring program will be implemented to ensure that crop productivity is restored to pre-construction conditions. Please refer to Resource Report 8 for additional information regarding agricultural land crossed by the Project.

1.3.1.9.4 Road and Railroad Crossings

Prior to construction, Tennessee will locate all existing underground utilities and make provisions for traffic management in work areas. The majority of road crossings will be completed using standard open cut or conventional boring methods. Conventional boring entails drilling a hole beneath travel arteries through which the pipe will pass. Resource Report 8 provides additional information regarding the crossing of roadways and railroads associated with the Project.

1.3.1.9.5 Horizontal Directional Drill Technology

Tennessee may employ horizontal directional drill (“HDD”) technology during construction of the Project to avoid sensitive resource areas and areas that present difficulties for conventional construction methodologies. Perhaps the greatest advantage of the HDD crossing technique is the fact that open cut trenching and other equipment disturbance within resource areas is not necessary, and, as a result, environmental impact to resource areas is minimized. However, a greater amount of equipment staging is required for HDD than the open cut crossing method. A minimum workspace footprint of 200 feet wide by 250 feet long is required at the entry and exit points to support the drilling operation. The rig side equipment and operations will typically include: the drilling rig and entry hole, control cab, drill string pipe storage, site office and tool storage trailers, power generators, bentonite storage, bentonite slurry mixing equipment, slurry pump, cuttings separation equipment, cuttings return/settlement pit, and the heavy construction equipment necessary to support the operation.

Pipe side equipment and operations will typically include: the exit point and slurry containment pit, cuttings return/settlement pit, cuttings separation and slurry reclamation equipment, drill string pipe storage, and the heavy construction equipment necessary to support the operation. In addition to the drilling operations to be conducted within this workspace footprint, additional temporary ROW width and length is required along the pipe side ROW (or adjacent to the ROW within ATWS in the case of PIs) in which to prefabricate the pipeline into one continuous section in preparation for the pull back. Once assembled, the pipeline is placed on pipe rollers so that it may be conveyed into the drill hole during the pull back operation. Table 1.3-1 provides information on proposed HDD crossings that may be implemented during Project construction.

**TABLE 1.3-1
HORIZONTAL DIRECTIONAL DRILL CROSSINGS FOR THE
300 LINE EXPANSION PROJECT**

Loop ID	Loop Segment	MP	Length ^a (feet)	Township	County / State	Comment
2	315	8.99 – 9.50	2,693	Richmond	Tioga / PA	Tioga River & Erie Railroad Co.
3	317	15.27 – 15.57	1,584	Towanda	Bradford / PA	Towanda River & Lehigh Railroad
5	321	2.85 – 3.30	2,383	Herrick / Uniondale	Susquehanna / PA	Main Street, Railroad & Stillwater Lake
7	325	1.71 – 2.46	3,960	Vernon	Sussex / NJ	Wetlands, Roads & Subdivision
		5.37 – 5.84	2,482	West Milford	Passaic / NJ	Wetlands & Roads
		5.87 – 6.46	3,115	West Milford	Passaic / NJ	Roads & Subdivision
		15.90 – 16.64	3,907	West Milford	Passaic / NJ	Wamaque River & Abandoned Railroad
Project Total			20,124	-	-	-

1.3.1.9.6 Blasting

Rock encountered during trenching will be removed using one of the techniques detailed below. The technique selected is dependent on relative hardness, fracture susceptibility, expected volume and location. Techniques include:

- Conventional excavation with a backhoe;
- Ripping with a bulldozer followed by backhoe excavation;
- Hammering with a pointed backhoe attachment or a pneumatic rock hammer, followed by backhoe excavation;
- Blasting followed by backhoe excavation; or
- Blasting surface rock prior to excavation.

All blasting activity will be performed according to strict guidelines designed to control energy release. Proper safeguards will be taken to protect personnel and property in the area. Please refer to Resource Report 6 – Geological Resources – for details relative to blasting. Mats made of heavy steel mesh or other materials will be used as necessary to prevent scattering of rock and debris. Tennessee will strictly adhere to all local, state, and federal regulations applicable to controlled-blasting and blast vibration limits with regard to structures and underground utilities while performing these activities. Special care will be

taken to monitor and assess blasting within 150 feet of dwellings and private or public water supply wells. Large rock not suitable for use as backfill material will either be windrowed along the edge of the ROW with landowner permission, buried on the ROW with landowner permission or hauled off the ROW and disposed of at an approved landfill or recycling facility. The remaining rock will be mixed with the subsoil and used to backfill the trench once the padding around the pipe has been installed.

1.3.1.9.7 Wetland Crossing Construction

Wetland locations along the pipeline loop segments are described in Resource Report 2 (Water Resources) and shown on the aerial alignment sheets. Pipeline construction across wetlands will be performed in accordance with the Commissions Procedures and Tennessee's Construction BMPs (see Volume II – Appendices A through E).

1.3.2 Aboveground Facilities

The aboveground facilities will be constructed in accordance with industry standards. Preliminary plot plans that detail the proposed aboveground facilities are provided within Volume III - Appendix L. The duration of construction for the aboveground facilities varies based upon the scope of the work required to construct each of the proposed facilities. Similarly, the number of workers required for construction of the aboveground facilities also varies based upon the scope of the work.

1.3.2.1 Clearing and Grading

The sites for the new and modified compressor stations and TWSs will be cleared of vegetation and graded as necessary to create level surfaces for the movement of construction vehicles on the sites and to prepare the areas for the building foundations. Tennessee will install silt fence and/or hay bales around disturbed areas, as appropriate to the land, soil, and weather conditions, to minimize the potential for erosion and for impacts to off-site wetlands and watercourses. Erosion and sediment controls will conform to Commission requirements and Tennessee's Construction BMPs. Blasting may be required to prepare a level site area. Such blasting, if required, will be conducted in accordance with appropriate state and local regulations.

1.3.2.2 Foundations

Where required, building foundations are likely to be constructed of poured reinforced concrete. Topsoil, if present, would be stripped from the area of the building foundations. Such soil may be used on-site either for landscaping or to provide soil cover for the septic system leach field, if acceptable. Additional soil or subsurface materials may be imported from approved sources to achieve the desired site/foundation grade.

1.3.2.3 Building Design and Construction

The valve shed building will have the same sized footprint with open walls and a sloping roof that will tie in to the compressor building roof line. Each compressor building will house the natural gas fueled turbo-compressor packages.

The proposed turbine exhaust stacks were initially designed with a stack height of 50 feet. Tennessee has performed air quality impact modeling to support its applications to the Pennsylvania Department of

Environmental Protection (“DEP”) and the New Jersey DEP for air permits to construct and operate the proposed turbo-compressors. Final stack heights will be determined through the applicable state-permit review process. Air quality modeling reports were submitted to the DEP in the respective states as part of Tennessee’s air permit applications. The modeling reports document that the proposed stack heights and other design parameters achieve acceptable dispersion of turbine exhaust emissions to comply with ambient air quality regulations and standards. The compressor unit design will incorporate various safety features, discussed below in Section 1.4.2 of this Resource Report.

During a typical building construction sequence, the steel frames would be erected followed by the installation of the roof system, exterior wall sheathing, wall insulation, and interior wall sheathing, as specified by the building design plans. Cutouts for protrusions through the siding (e.g., inlet and exhaust vents) would be flashed to ensure that the buildings would be weather-tight.

1.3.2.4 High Pressure Piping

During a typical building construction sequence, the steel frames would be erected first, followed by the installation of the roof system, exterior wall sheathing, wall insulation, and interior wall sheathing, as specified by the building design plans. Cutouts for protrusions through the siding (e.g., inlet and exhaust vents) would be flashed to ensure that the buildings would be weather-tight.

1.3.2.5 Pressure Testing

Prior to placing each of the compressor stations (whether new or modified) in-service, Tennessee proposes to conduct pressure testing of the piping system. Tennessee proposes to conduct this test in accordance with applicable state and local code or regulatory requirements.

1.3.2.6 Infrastructure Facilities

The installation of the infrastructure facilities includes the various compressor and auxiliary equipment, piping, and other electrical and mechanical systems. These systems have been previously installed at the existing compressor station sites where upgrades are planned. However, Tennessee anticipates that new electric and telephone service lines, in addition to domestic water service and sewer disposal systems will be installed for the proposed two new compressor station facilities. On-site water wells and septic systems will be installed if municipal water and sewer service is not available for the new compressor station sites.

1.3.2.7 Control Checkout and Engine Startup

Before the new compressor units are put into service at the new and modified compressor stations, Tennessee shall develop and implement station commissioning plans. Tennessee anticipates that these plans would include the checking and testing of controls and safety features, including the emergency shutdown system, relief valves, gas and fire detection facilities, over-speed, vibration, and other on- and off-engine protection and safety devices.

1.3.2.8 Final Grading and Landscaping

Prior to construction, Tennessee will develop plans for the final grading and landscaping of the areas that will be disturbed during construction. These final grading and landscaping plans will be consistent with the Commission's Plan for the restoration of uplands.

1.3.3.9 Erosion Control Procedures

During the construction of the proposed new and modified compressor stations, Tennessee will adhere to the applicable provisions of the Commission's Plan and Procedures. A copy of the FERC Plan and Procedures is provided in Appendix A (Volume II). As set forth in the above-referenced documents, Tennessee proposes to install appropriate erosion controls (e.g., silt fence and/or hay bales) to minimize the potential for erosion from construction of the facilities.

1.3.3 Timeframe for Construction

Construction of the Project will commence after all private ROWs and federal and state ROWs and permits have been acquired for the Project and Tennessee has obtained a certificate of public convenience and necessity for the Project and has accepted such certificate. Certain aspects of construction, including winter tree clearing to avoid Indiana bat breeding periods and installation of HDD segments, may begin during the second half of 2010. Tennessee also anticipates that certain construction activities will occur at existing Compressor Stations 317, 321, and 325 beginning in the second half of 2010. The remaining construction activities for the Project are scheduled for 2011. All Project facilities are anticipated to go in-service no later than November 2011.

Tennessee estimates that each pipeline loop segment will require one (1) construction spread consisting of approximately 85 to 115 construction personnel, and each segment will take approximately 10 to 15 weeks to complete.

Upgrades to the existing compressor station facilities will require anywhere from approximately 20-40 construction workers, and each compressor station will take approximately six to ten months to complete, depending upon the nature of the upgrades. Construction of the proposed new compressor station facilities is anticipated to require approximately 100 construction workers per compressor station facility and is anticipated to require 12 months to complete.

Tennessee does not anticipate the need for additional permanent staff for operation of the new Project facilities, and no new operations offices or district offices will be required for operation of the Project facilities.

1.3.4 Environmental Training for Construction

Tennessee would use at least one full-time Environmental Inspector ("EI") for each pipeline loop section during Project construction, as well as one Chief Environmental Inspector to oversee the EI staff. Additionally, one dedicated EI would be assigned to each of the two new compressor station facilities proposed for the Project, while the EIs assigned to oversee construction for the individual pipeline loop sections will also oversee the construction for the modifications to the applicable compressor stations. The EIs will monitor construction activities to ensure compliance with the Commission's Plan and Procedures, all applicable federal, regional, state, and local environmental permits, site-specific

construction and restoration plans or other mitigation measures, and landowner agreements. Additionally, Tennessee would conduct environmental training in advance of construction, and the EIs would perform all duties as specified in the FERC Plan and Procedures (see Appendix A in Volume II). The level of training will be commensurate with the type of duties of the personnel.

1.4 OPERATION AND MAINTENANCE PROCEDURES

The Project will be owned, operated, and maintained by Tennessee. Tennessee will operate and maintain the newly constructed pipeline loop segments in the same manner as it currently operates and maintains its major interstate pipeline facilities in the northeast and in accordance with the requirements of the Commission, the DOT's Pipeline and Hazardous Materials Safety Administration ("PHMSA") in accordance with 49 CFR Part 192, and industry-proven practices and techniques. The facilities will be operated and maintained in a manner such that pipeline integrity is protected to ensure 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, aerial markers, and decals will be painted or replaced to ensure that the pipeline locations will be visible from the air and ground. The pipeline and aboveground facilities will be patrolled on a routine basis, and personnel well qualified to perform both emergency and routine maintenance on interstate pipeline facilities will handle maintenance.

1.4.1 Pipeline Facilities

The pipeline will be patrolled from the air on a periodic basis. This will provide information on possible leaks, construction activities, erosion, exposed pipe, population density, possible encroachment, and any other potential problems that may affect the safety and operation of the pipeline. In addition, Tennessee is a participant in the "Dig Safe" system for utility companies in Pennsylvania and New Jersey as well as the national "811" call system. Under the "Dig Safe" system, anyone planning excavation activities may call a single number to alert all utility companies. Representatives of the utility companies that might be affected then visit the site and mark their facilities so that the excavation can proceed with relative certainty as to the location of all underground lines.

Other maintenance functions will include: (1) periodic seasonal mowing of the ROW in accordance with the timing restrictions outlined in the Commission's Plan and Procedures; (2) terrace repair, backfill replacement, and drain tile repair as necessary; (3) periodic inspection of water crossings; and (4) maintenance of a supply of emergency pipe, leak repair clamps, sleeves, and other equipment needed for repair activities. Tennessee will not use herbicides or pesticides within 100 feet of a wetland or waterbody unless approved by appropriate state and local agencies.

Cathodic protection of the pipeline will be conducted with impressed current systems that employ rectifier/groundbed systems. Units will be installed along the pipeline and aboveground test stations will be installed at various locations along the pipeline to gather accurate information for potential current adjustments. The cathodic protection system will be regularly monitored to maintain required pipe-to-soil potential and will be achieved in accordance with the specifications set forth by Tennessee that meet DOT regulations.

In areas where the pipeline parallels high-voltage electric transmission lines, an alternating current mitigation system will be implemented as necessary to reduce stray current, to prevent possible shock to personnel during post-construction activities, and to prevent interference with the cathodic protection system. This system will be primarily composed of zinc ribbon or other suitable design.

1.4.1.1 Cleared Areas

A typical post-construction permanent ROW of 50 feet will be maintained for the new pipeline loop segments (10 feet through wetland resource areas) in accordance with the Commission's Plan and Procedures. This permanent ROW generally consists of 25 feet of new permanent ROW and 25 feet of existing permanent ROW associated with the existing 24-inch 300 Line pipeline. Maintaining a cleared ROW is necessary for the following reasons:

- Access for routine pipeline patrols and corrosion surveys;
- Access in the event that emergency repairs of the pipeline are needed; and
- Visibility during aerial patrols.

1.4.1.2 Erosion Control

Erosion problems on the pipeline ROW will be reported to the local operations supervisor. These reports may originate from landowners or company personnel performing routine patrols. Corrective measures will be conducted as needed.

1.4.1.3 Periodic Pipeline and ROW Patrols

During these surveys, all permanent erosion control devices that are installed during construction will be inspected to ensure that they are functioning properly. Additionally, attention will be given to:

- Existing stormwater outfalls along the alignment;
- Erosion and washouts along the ROW;
- Water control devices such as diversions;
- Condition of banks at drainage ditch crossings;
- Fallen timber or other threats to the pipeline;
- Shrubs and other vegetation planted during construction; and
- Any other conditions that could endanger the pipeline.

The local operations supervisor will be notified of any conditions that need attention. Corrective measures will be performed as needed.

1.4.2 Aboveground Facilities

Tennessee will operate and maintain the proposed aboveground facilities in accordance with standard procedures designed to ensure the integrity of the facilities and to provide its customers and the general

public with a safe and dependable natural gas supply. The facilities will be designed, constructed, and operated in accordance with requirements of the Commission, DOT, industry-proven practices and techniques, and other federal, state, and local requirements as applicable.

Responsibilities of Tennessee will include: (1) operation and maintenance of pipeline and aboveground facilities safely to provide the required gas flow; (2) inspection and maintenance of the pipeline system; (3) regular monitoring of the ROW; (4) development and implementation of an ongoing program of safety and environmental compliance; (5) regulatory compliance maintenance inspections; (6) administration; and (7) landowner relations.

In accordance with DOT regulations, 49 CFR Part 192, the facilities will be regularly inspected for leakage as part of scheduled operations and maintenance. Tennessee proposes to follow various routine maintenance and operations procedures to ensure that the stations operate safely. Standard Tennessee operations at existing compressor stations 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 application of fertilizer. Tennessee's standard operations currently also include the periodic checking of safety and emergency equipment and cathodic protection systems.

Project facilities will be marked and identified in accordance with applicable regulations. Liaison will be maintained with the public as well as with government agencies having jurisdiction over the compressor stations. Overall, maintenance activities will be in compliance with requirements of the Commission's Plan, as well as other applicable regulatory requirements. The compressor stations will be remotely linked to Tennessee's information and data software networks and infrastructure which monitors the pipeline system on a 24-hour per day basis.

1.5 FUTURE PLANS AND ABANDONMENT

Currently, Tennessee does not have plans for future expansion of the facilities proposed as part of the Project in this proceeding. The addition of pipeline loop segments and two new compressor stations, as well as the modifications to existing compressor stations, that comprise the Project are designed to efficiently meet market needs, as demonstrated by the execution of a binding precedent agreement for the entire amount of additional capacity resulting from the Project. Any future expansion of the facilities proposed as part of this Project will be dependent upon a showing of additional demand for natural gas services.

Tennessee is currently in the conceptual stage of a possible northeast supply diversification project and has held preliminary discussions with producers in the Marcellus Shale production areas regarding the connection of new gas supplies from that production area to Tennessee's system for transportation to northeast markets. Tennessee is conducting a non-binding open season to gauge potential interest in such a future project. The anticipated in-service date for such a project is expected to be November 2012 or later. Following the close of this open season, Tennessee will evaluate the bids received to determine if such a project is economically justified, and, if so, to determine the proposed scope and facilities needed for a future project. Although the open season for a future project is not yet completed, Tennessee believes that any facilities required for any future project will not require any modifications to the pipeline loop segments currently being proposed as part of the Project. However, depending upon the

results of the open season, Tennessee may consider extending the partial loop segments on the 300 Line by completing those loops to become a second line in order to efficiently create any needed incremental capacity. Similarly, if deemed necessary to meet the needs of shippers participating in the open season, Tennessee may consider the addition of horsepower at existing compressor stations.

Tennessee will design any facilities (which may consist of pipeline looping, compression, and/or cooling facilities) needed for a future expansion project to be compatible with Tennessee’s existing facilities, including the Project facilities, and will undergo the applicable federal, state, and local regulatory review (including the filing of a separate application for a certificate of public convenience and necessity from the Commission). Tennessee believes that any future expansion is supplemental to the currently proposed facilities of the Project and should have limited to no effect on the environment in the areas currently proposed for construction of the Project.

1.6 PERMITS AND APPROVALS

All construction, operation, and maintenance of the Project will be conducted in accordance with Tennessee’s specifications and all applicable federal, state, and local permit requirements. The environmental permits, reviews, and clearances that have been or will be sought for the Project are identified in Table 1.6-1. Tennessee and its agents have consulted federal, state, and local regulatory officials and government agencies regarding this Project. Volume II – Appendix G contains agency correspondence for the Project and includes a summary table of correspondence for reference.

TABLE 1.6-1 PERMITS, LICENCES, APPROVALS, AND CERTIFICATES REQUIRED FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE 300 LINE EXPANSION PROJECT		
Permit/Approval	Administering Agency	Status
Federal		
Section 404 Individual Permit	Army Corps of Engineers Baltimore District	Applications to be submitted June 2009
	Army Corps of Engineers New York District	
	Army Corps of Engineers Philadelphia District	
	Army Corps of Engineers Pittsburg District	
Clearance	USFWS Pennsylvania Field Office	Field surveys scheduled for Spring 2009
	USFWS New Jersey Field Office	

**TABLE 1.6-1
PERMITS, LICENCES, APPROVALS, AND CERTIFICATES REQUIRED FOR
CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE 300 LINE EXPANSION
PROJECT**

Permit/Approval	Administering Agency	Status
SF 299 Application for Transportation and Utility Systems on Federal Lands	National Park Service	Application to be submitted June 2009
Pennsylvania State		
401 Water Quality Certification	PADEP Regional Bureaus of Watershed Management	Applications to be submitted June 2009
Water Obstruction and Encroachment Permits		
NPDES – Hydrostatic Testing General Permit (PAG 10)	PADEP Bureau of Water Quality Protection	Application to be submitted 4 th quarter 2009
Plan Approval (Air Quality Permit) for Station 321	PADEP Bureau of Air Quality—Northeast Region	Application to be submitted March 2009
Plan Approval (Air Quality Permit) for Stations 315 & 313	PADEP Bureau of Air Quality—Northcentral Region	Application to be submitted March 2009
Plan Approval (Air Quality Permit) for Station 303 & 310	PADEP Bureau of Air Quality—Northwest Region	Application to be submitted March 2009
Highway Occupancy Permit	PennDOT	Application to be submitted 2 nd Quarter 2009
Application for ROW on State Game Lands	PA Fish and Boat Commission	
Clearance (Rare Species)	PA Dept. of Conservation and Natural Resources	Field surveys scheduled for Spring 2009
Clearance (Cultural Resources)	PA Historic Preservation Office	Final report to be submitted in June 2009
Pennsylvania Local and County		
NPDES and GP Review	PA DEP / County Soil Conservation Districts	Application to be submitted June 2009
Erosion & Sediment Control Plan Review	County Soil Conservation Districts	

**TABLE 1.6-1
PERMITS, LICENCES, APPROVALS, AND CERTIFICATES REQUIRED FOR
CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE 300 LINE EXPANSION
PROJECT**

Permit/Approval	Administering Agency	Status
New Jersey State		
401 Water Quality Certification	NJDEP Land Use Regulation Program	Applications to be submitted June 2009
Freshwater Wetlands and Stream Encroachment Permits		
Transition Area Waivers		
SPDES General Construction Stormwater Permit		
Short Term Water Use Permit By Rule	NJDEP Bureau of Water Allocation	
NJPDES Hydrostatic Test Water Discharge GP (NJG0132993)	NJDEP Division of Water Quality	Application to be submitted 4 th quarter 2009
Clean Water Assurance Form	NJDEP	Application to be submitted June 2009
Pre-Construction and Title V Operating Permit	NJDEP Air Quality Control Program	March 2009
Air Permit Application Certificate		
Application for Banking and/or Verifying Creditable Emission Reductions		
Air Pollution Control Permit		
Clearance	NJ Natural Heritage Program	Field surveys scheduled for Spring 2009
Clearance	NJ State Historic Preservation Office	Final report to be submitted in June 2009
New Jersey Local / County		
NJDES GP – Stormwater Discharge (NJG0088323)	Soil Conservation Districts	Application to be submitted June 2009

1.7 NONJURISDICTIONAL FACILITIES

Other than auxiliary Section 2.55(a) facilities (valves, pig launchers and receivers, and other appurtenant equipment) already described as part of this Project, Tennessee is not proposing to construct any non-jurisdictional facilities and is not aware of any other non-jurisdictional facilities being constructed by others as a direct result of the proposed Project.

1.8 LANDOWNER INFORMATION

The names and addresses of landowners whose property would be crossed by the Project are included in Appendix N in Volume IV. These landowners were contacted beginning in July 2008 to request access for environmental surveys (wetland/waterbody delineation, habitat evaluations, cultural resources) on the pipeline routes, access roads, staging/pipe yards, and aboveground facility sites. Surveys have been completed or are underway for properties along the Project area where access permission has been granted.

In accordance with 18 CFR § 157.6(d), Tennessee will provide notification of the Project to affected and abutting landowners within three business days following the date that the Commission issues a notice of the certificate application. In addition, within three business days of the date that the Commission assigns a docket number to the certificate application, a copy of the certificate application will be placed in public libraries across the Project area. Tennessee will also have a public notice of the filing of the certificate application published in a daily or weekly newspaper of general circulation (see Table 1.8-1 below) across the Project area no later than 14 days after the Commission assigns a docket number to the certificate application.

TABLE 1.8-1 LIBRARIES AND NEWSPAPERS WITHIN THE 300 LINE EXPANSION PROJECT AREA		
Project Component	Libraries	Newspapers
313 Loop Segment and Compressor Station 313	Coudersport Public Library	Cameron County Endeavor Potter Leader Enterprise
315 Loop Segment and Compressor Station 315	Green Free Library	Wellsboro Gazette
317 Loop Segment and Compressor Station 317	Towanda Public Library	Towanda Daily Review Wyalusing Rocket Courier Troy Penny Saver
319 Loop Segment and Compressor Station 319	Towanda Public Library Susquehanna County Free Library	Towanda Daily Review Wyalusing Rocket Courier Troy Penny Saver Susquehanna Independent Weekender

TABLE 1.8-1 LIBRARIES AND NEWSPAPERS WITHIN THE 300 LINE EXPANSION PROJECT AREA		
Project Component	Libraries	Newspapers
321 Loop Segment and Compressor Station 321	Susquehanna County Free Library Wayne County Library	Susquehanna Independent Weekender Wayne Independent
323 Loop Segment and Compressor Station 323	Pike County Public Library	Pike County Courier
325 Loop Segment and Compressor Station 325	Sussex County Library - Main Branch West Milford Township Library	The Record New Jersey Herald
Compressor Station 303	Bradford Area Public Library	The Bradford Era The Kane Republican
Compressor Station 310	Franklin Public Library	The Derrick