U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

Special Permit Analysis and Findings Class 1 and Class 2 to Class 3 Locations

Special Permit Information:

Docket Number: PHMSA-2020-0001

Requested By: Florida Gas Transmission Company, LLC

Operator ID#: 5304

Original Date Requested: December 18, 2019

Original Issuance Date: March 31, 2022

Effective Dates: March 31, 2022 to March 31, 2032

Code Section(s): 49 CFR 192.611(a) and (d) and 192.619(a)

Purpose:

The Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), 1 provides this information to describe the facts of the subject special permit application submitted by Florida Gas Transmission Company, LLC (FGT), 2 to discuss any relevant public comments received with respect to the application, to present the engineering and safety analysis of the special permit application, and to make findings regarding whether the requested special permit should be granted and, if so, under what conditions. FGT requested that PHMSA waive compliance from the 49 Code of Federal Regulations (CFR) 192.611(a) and (d) and 192.619(a) for natural gas transmission pipeline segments, where the class location has changed from Class 1 to a Class 3 locations and from Class 2 to Class 3 locations.

¹ Throughout this special permit the usage of "PHMSA" or "PHMSA OPS" means the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety.

² FGT is owned by Energy Transfer and Kinder Morgan, Inc. Energy Transfer operates FGT.

Pipeline System Affected:

This special permit application applies to the FGT request for a waiver of the class location change requirements in 49 CFR 192.611(a) and (d) and 192.619(a) for approximately 3.761 miles of gas transmission pipelines located in Brevard, Lake, Orange, and Osceola Counties, Florida.

Pipe specifications including outside diameter, year installed, seam type, coating type, pipe grade, wall thickness, maximum allowable operating pressure (MAOP), minimum pressure test pressure, and pressure test factor based on the minimum test pressure are detailed in **Table 1** – **Pipe Specifications by Line Name**.

	Table 1 – Pipe Specifications by Line Name									
Line Name	Outside Diameter (inches)	Year Installed	Seam Type	Coating Type	Grade	Wall Thickness (inches)	MAOP (psig)	Min. Test Pressure (psig)	Pressure Test Factor	
Mainline Loop CMPR STA 17-18	26	1968/1969	DSAW	Coal Tar Enamel / Fusion Bonded Epoxy	X60	0.294	977	1,347	1.38	
Mainline Loop STA18-STA19	26	1968	DSAW	Coal Tar Enamel	X60	0.294	974 / 977	1,347	1.38	
MLV 18-1 to C/S 19	30	1995	DSAW	Fusion Bonded Epoxy	X70	0.291	975	1,305	1.34	

Note: DSAW is double submerged arc welded seam pipe.

Without this special permit, 49 CFR 192.611(a) would require FGT to replace the *special permit segments* with stronger pipe or reduce the pipeline MAOP for a Class 1 to Class 3 location change.

Special Permit Request:

On December 18, 2019, FGT applied to PHMSA for a special permit seeking relief from 49 CFR 192.611(a) and (d) and 192.619(a) for the below-listed *special permit segments*, where a class location change occurred from the original Class 1 to a Class 3 location and from a Class 2 to Class 3 location on the 26-inch diameter Mainline Loop STA18-STA19, 26-inch diameter Mainline Loop CMPR STA 17-18, and 30-inch diameter MLV 18-1 to C/S 19 Pipelines in Brevard, Lake, Orange, and Osceola Counties, Florida.

This special permit applies to the *special permit segments* and *special permit inspection areas* described and defined as follows, using the FGT survey station references:

Special Permit Segments:

This special permit applies to the *special permit segments* and is identified using the FGT survey station (SS) references as detailed in **Table 2 – Special Permit Segments**.

	Table 2 – Special Permit Segments									
Special Permit Segment Number	Outside Diameter (inches)	Line Name	Length (feet)	Start Survey Station (SS)	End Survey Station (SS)	County, State	Class Change Summary	Year Installed	Seam Type	MAOP (psig)
165856	26	Mainline Loop CMPR STA 17-18	2,368	1835+77	1859+45	Lake, FL	2 to 3	1969	DSAW	977
165857	26	Mainline Loop CMPR STA 17-18	216	2075+20	2077+36	Lake, FL	2 to 3	1968	DSAW	977
165858	26	Mainline Loop CMPR STA 17-18	724	2081+91	2089+15	Lake, FL	2 to 3	1969	DSAW	977
165859	26	Mainline Loop CMPR STA 17-18	587	2089+15	2095+01	Lake, FL	2 to 3	1969	DSAW	977
165860	26	Mainline Loop CMPR STA 17-18	643	2195+14	2201+57	Lake, FL	2 to 3	1969	DSAW	977
165897	26	Mainline Loop STA18-STA19	1,069	2967+96	2978+65	Brevard, FL	1 to 3	1968	DSAW	977
169426	26	Mainline Loop STA18-STA19	614	1100+68	1106+82	Orange, FL	1 to 3	1968	DSAW	974
169427	26	Mainline Loop STA18-STA19	4,618	1106+82	1153+00	Orange, FL	1 to 3	1968	DSAW	974
169428	26	Mainline Loop STA18-STA19	3,191	1153+00	1184+91	Orange, FL	1 to 3	1968	DSAW	977
165900	26	Mainline Loop STA18-STA19	291	3435+06	3437+97	Brevard, FL	2 to 3	1968	DSAW	977
165909	26	Mainline Loop STA18-STA19	1,588	3859+58	3875+46	Brevard, FL	2 to 3	1968	DSAW	977
170717	30	MLV 18-1 to C/S 19	3,668	60+17	61+43	Osceola, FL	1 to 3	1995	DSAW	975
165997	30	MLV 18-1 to C/S 19	282	61+43	64+25	Osceola, FL	1 to 3	1995	DSAW	975

Special Permit Inspection Areas:

The *special permit inspection areas* are defined as the area that extends 220 yards on each side of the centerline along approximately 185.7 miles of 26-inch diameter Mainline Loop CMPR STA 17-18, 26-inch diameter Mainline Loop STA18-STA19, and 30-inch diameter MLV 18-1 to C/S 19 Pipelines as shown in **Table 3 – Special Permit Inspection Areas**.

	Table 3 – Special Permit Inspection Areas									
Special Permit Inspection Area Name	Special Permit Segment Number(s)	Outside Diameter (inches)	Line Name	Start Survey Station (MP)	End Survey Station (MP)	Length ³ (miles)				
FLMEB-17	165856, 165857, 165858, 165859, 165860	26	Mainline Loop CMPR STA 17-18	608.00	668.8	60.8				
FLMEB-18	165897, 165900, 165909, 169426, 169427, 169428	26	Mainline Loop STA18-STA19	668.8	742.5	73.7				
FLMED1819	170717, 165997	30	MLV 18-1 to C/S 19	683.3	734.5	51.2				

³ If the *special permit inspection area* footage does not extent from launcher to receiver then the *special permit inspection area* would need to be extended.

The *special permit inspection areas* are located in Brevard, Lake, Marion, Orange, and Osceola Counties, Florida. Figures 1 through 3 are maps showing the 26-inch diameter Mainline Loop CMPR STA 17-18, 26-inch diameter Mainline Loop STA18-STA19, and 30-inch diameter MLV 18-1 To C/S 19 Pipelines special permit segments and special permit inspection areas.

Public Notice:

On March 26, 2020, PHMSA posted a notice of this special permit request in the Federal Register (85 FR 17176) with a closing date of April 27, 2020. PHMSA received no comments on this special permit application during the comment period. PHMSA received the same comment repeated three (3) times several months after the close of the comment period. The comment criticized special permit application processing delay, but the comment did not provide an opinion on the safety or merit of this specific proposed special permit.

PHMSA has reviewed this special permit application to ensure the special permit conditions address pipeline safety and integrity threats to the pipeline in the *special permit segments* and special permit inspection areas. The special permit will require FGT's Operations and Maintenance (O&M) Manual and Procedures to provide a systematic program to review and remediate the pipeline for safety concerns. Additional operational integrity reviews and remediation requirements will be required by this special permit for these *special permit* segments for Class 1 to 3 location changes or Class 2 to 3 location changes.

The FGT special permit application letter, Federal Register notice, FEA and FONSI, special permit with conditions, special permit analysis and findings document, and all other pertinent documents are available for review in Docket No. PHMSA-2020-0001 in the Federal Docket Management System (FDMS) located on the internet at www.Regulations.gov.

Analysis:

Background: On June 29, 2004, PHMSA published in the Federal Register (69 FR 38948) the criteria it uses for the consideration of applications for class location change waivers, now being granted or denied through a special permit. First, certain threshold requirements should be met on a pipeline *special permit segment* for a class location change special permit to be granted.

⁴ The special permit inspection areas include the special permit segments.

Second, the age and manufacturing process of the pipe; system design, and construction; environmental, operating and maintenance histories; and integrity management program elements are evaluated as significant criteria. These significant criteria are presented in matrix form and can be reviewed in the FDMS, Docket No. PHMSA–RSPA-2004-17401. Third, special permits will only be granted when pipe conditions and active integrity management provides a level of safety greater than or equal to a pipe replacement or pressure reduction. The operator's Federal pipeline safety regulation compliance history is also evaluated as part of the criteria matrix for acceptability prior to issuance of a special permit.

<u>Threshold Requirements</u>: Each of the threshold requirements published by PHMSA in the June 29, 2004, Federal Register notice is discussed below in regards to the FGT special permit request.

- 1) No pipeline segments in a class location changing to Class 4 location will be considered.
 - This special permit request is for the *special permit segments* on the FGT 26-inch diameter Mainline Loop CMPR STA 17-18, 26-inch diameter Mainline Loop STA18-STA19, and 30-inch diameter MLV 18-1 To C/S 19 Pipelines, where a change has occurred from a Class 1 location to a Class 3 location or a Class 2 location to a Class 3 location.
 - FGT has met this requirement.
- 2) No bare pipe will be considered.
 - The *special permit segments* are externally coated with coal tar epoxy or fusion bonded epoxy. FGT has met this requirement of no bare pipe.
 - FGT has not reported any coating issues such as disbonded coating.
 - FGT has met this requirement.
- 3) No pipe containing wrinkle bends will be considered.
 - There are no wrinkle bends in the *special permit segments*.
 - FGT has met this requirement.
- 4) No pipe segments operating above 72% of the specified minimum yield strength (SMYS) will be considered for a Class 3 special permit.
 - The *special permit segments* operate at or below 72% SMYS.

- The pipe for the *special permit segments* on the Mainline Loop CMPR STA 17-18 Pipeline is 26-inch diameter, 0.294-inch wall thickness, pipe strength of 60,000 psig. The pipe seam is a double submerged, arc-welded seam and was manufactured by Kaiser Steel in 1968.
- The pipe for the *special permit segments* on the Mainline Loop STA18-STA19

 Pipeline are 26-inch diameter, 0.294-inch wall thickness, pipe strength of 60,000 psig.

 The pipe seam is a double submerged, arc-welded seam and was manufactured by Kaiser Steel in 1968.
- The pipe for the *special permit segments* on the MLV 18-1 To C/S 19 Pipeline are 30-inch diameter, 0.291-inch wall thickness, pipe strength of 70,000 psig. The pipe seam is a double submerged, arc-welded seam and was manufactured by Napa Pipe Corporation in 1993.
- FGT has met this requirement.
- 5) Records must be produced that show a hydrostatic test to at least 1.25 x MAOP and 90% of SMYS.
 - The *special permit segments* on the Mainline Loop CMPR STA 17-18 Pipeline were pressure tested in 1968 at 1,349 psig for 24 hours.
 - The *special permit segments* on the Mainline Loop STA18-STA19 Pipeline were pressure tested in 1968 at 1,347 psig for 24 hours.
 - The *special permit segments* on the MLV 18-1 To C/S 19 Pipeline were pressure tested in 1994 at 1305 psig for eight (8) hours.
 - FGT has met this pressure requirement, but pressure test records must meet 49 CFR 192.517(a).
- 6) In-line inspection (ILI) must have been performed with no significant anomalies identified that indicate systemic problems such as stress corrosion cracking (SCC).
 - FGT ran ILI tools on the Mainline Loop CMPR STA 17-18 Pipeline in 2006, 2013, and 2020.
 - FGT ran ILI tools on the Mainline Loop STA18-STA19 Pipeline in 2004, 2011, and 2018.
 - FGT ran ILI tools on the MLV 18-1 To C/S 19 Pipeline in 2009 and 2015.

- FGT has had no SCC findings or failures. Due to the coating type and operational and environmental conditions of the pipeline, FGT has evaluated the *special permit segments* and *special permit inspection areas* as being not susceptible to SCC in accordance with ASME B31.8S.
- 7) Criteria for consideration of a class location change waiver, being considered through the special permit, published by PHMSA in the Federal Register (69 FR 38948), define a *waiver* inspection area (special permit inspection area) as up to 25 miles of pipe on either side of the waiver segment (special permit segment).
 - A special permit would be contingent upon FGT's incorporation of the *special permit* segments in its written integrity management program as covered segments in a high
 consequence area in accordance with 49 CFR 192.903 and to assess and remediate
 threats to the *special permit inspection areas*.

<u>Criteria Matrix</u>: The data submitted by FGT for the *special permit segments* have been compared to the class location change special permit criteria matrix. The data fall within the *probable acceptance or the possible acceptance* column of the criteria matrix, except for PHMSA enforcement findings which fall under the *requires substantial justification*.

- The *special permit segments* fall in the *probable acceptance* column of the criteria matrix for:
 - Class 2 to 3 location, pipe manufacturer (MLV 18-1 To C/S 19 Pipeline), pipe material, design stress, coating type (MLV 18-1 To C/S 19 Pipeline), girth welds (Mainline Loop STA18-STA19 and MLV 18-1 To C/S 19 Pipelines), depth of pipe cover, test pressure, test failures, local geology, type service, pressure fluctuations, safety related conditions, direct assessment, ILI type, and damage prevention program.
- The *special permit segments* fall in the *possible acceptance* column of the criteria matrix for:
 - Class 1 to 3 location, pipe manufacturer (Mainline Loop CMPR STA 17-18 and Mainline Loop STA18-STA19 Pipelines), pipe coating type (may shield cathodic protection (CP) Mainline Loop CMPR STA 17-18 and Mainline Loop STA18-STA19 Pipelines), leaks and failures, CP, HCA program, and ILI program.

- The *special permit segments* fall in the *requires substantial justification* column of the criteria matrix for:
 - Pipe girth weld records are not available for the Mainline Loop CMPR STA 17-18 Pipeline.

Operational Integrity Compliance:

To inform PHMSA's decision about whether a special permit could provide a level of safety greater than or equal to a pipe replacement or pressure reduction and is consistent with pipeline safety, PHMSA reviewed this special permit request to understand the known type of integrity threats that are in the *special permit segments* and *special permit inspection areas*. This integrity information was used to design special permit conditions to provide a systematic program to review and remediate the pipeline for safety concerns. Additional operational integrity review and remediation requirements are required by this special permit to ensure that the operator has an ongoing program to locate and remediate safety threats. These threats to integrity and safety include any issues with the pipe coating quality, cathodic protection effectiveness, operations damage prevention program, pipe depth of soil cover, weld seam and girth weld integrity, anomalies in the pipe steel and welds, and material and structures either along or near the pipeline that could cause the cathodic protection system to be ineffective. PHMSA has carefully designed a comprehensive set of conditions that FGT must implement to comply with this special permit.

Past Enforcement History – January 1, 2011 through June 15, 2021:

During January 1, 2011, through June 15, 2021, FGT was cited in five (5) enforcement actions with a total of \$197,200 in assessed civil penalties. PHMSA issued three (3) Corrective Action Orders, one (1) Notice of Probable Violation, and one (1) Safety Order to FGT.

Tables 4 and **5** below show PHMSA enforcement actions and civil penalties for FGT:

	Table 4 - FGT Enforcement Matters from January 1, 2011, through June 15, 2021								
Status	Corrective Action Order Notice of Amendment Notice of Probable Violation Safety Order Letter Total								
CLOSED	2	0	1	1	0	4			
OPEN	1	0	0	0	0	1			
Total	3	0	1	1	0	5			

Table 5 - FGT Enforcement Matters from								
	January 1, 2011, through June 15, 2021							
Proposed	Proposed Awaiting Order Assessed Withdrawn/Reduced Collected							
\$197,200 \$0 \$197,200 \$0 \$197,200								

From January 1, 2011, through June 15, 2021, Energy Transfer, the operator of FGT, was cited in 20 enforcement actions with a total of \$679,300 in assessed civil penalties on their Energy Transfer Company (ETC), Florida Gas Transmission Company (FGT), Panhandle Eastern Company (PEPL), Transwestern Pipeline Company (Transwestern), and Trunkline Gas Company (Trunkline) pipeline systems. PHMSA issued two (2) Corrective Action Orders, four (4) Notice of Amendments, eight (8) Notices of Probable Violations, seven (7) Warning Letters, and two (2) Safety Orders to Energy Transfer.

Tables 6 and 7 below show PHMSA's enforcement actions and civil penalties for Energy Transfer Partners on these pipeline systems – ETC, FGT, PEPL, Transwestern, and Trunkline with operator identification numbers (OPID#) 32099, 5304, 15105, 19610, and 19730.

	Table 6 - Summary of Enforcement Findings for ETC, FGT, PEPL, Transwestern, and Trunkline from January 1, 2011, through June 15, 2021									
Status	Status Corrective Action Order Notice of Amendment Notice of Probable Violation Safety Order Letter Total									
CLOSED	2	4	8	2	7	23				
OPEN	1	0	1	0	0	2				
Total	3	4	9	2	7	25				

Table 7 - ETC, FGT, PEPL, Transwestern, and Trunkline Civil Penalty Status								
	January 1, 2011 through June 15, 2021							
Proposed	Proposed Awaiting Order Assessed Withdrawn/Reduced Collected							
\$679,300	\$0	\$679,300	\$0	\$679,300				

Summary of enforcement findings for ETC, FGT, PELP, Transwestern, and Trunkline:

Reporting, design, welding, corrosion control, operations and maintenance procedures, public awareness, qualification of operating personnel, and integrity management.

• 49 CFR 192.5, 192.12, 192.167, 192.225, 192.402, 192.404, 192.452, 192.463, 192.465, 192.467, 192.469, 192.505, 192.589, 192.605, 192.616, 192.619, 192.709, 192.739, 192.745, 192.905, and 192.917.

Table 8 below gives a complete summary of the findings and the specific 49 CFR Part 191 and 192 violation:

Table 8 - Summary of Enforcement Findings for ETC, FGT, PEPL, Transwestern, and Trunkline January 1, 2011 through June 15, 2021							
		Notice of Amend	lment				
OME Procedural Manual	8	Public Awareness	3	Transportation of HL	2		
Notice of Amendment Total:							
		Notice of Probable V	Violation				
Corrosion Control	4	OME Procedural Manual	3	Operation and/or Maintenance	9		
Operator Qualification	1	Integrity Management	7	Design	1		
		Notio	ce of Prob	able Violation Total:	25		
		Warning Lett	er				
Corrosion Control	Corrosion Control 3 Reporting 1 Transportation of Gas						
Integrity Management 3 Welding of Steel in Pipelines 1							
Notice of Amendment Total:							
Grand Total:							

Findings:

Based on the information submitted by FGT and PHMSA's analysis of the technical, operational,

and safety issues, PHMSA finds that granting this special permit to FGT to operate the special

permit segments on the 26-inch diameter Mainline Loop STA18-STA19, 26-inch diameter

Mainline Loop CMPR STA 17-18, and 30-inch diameter MLV 18-1 to C/S 19 Pipelines in

Brevard, Lake, Orange, and Osceola Counties, Florida, for approximately 3.761 miles of Class 1

or Class 2 location pipe in a Class 3 location is consistent with pipeline safety.

FGT's enforcement record does not reflect sustained and substantial noncompliance with 49

CFR Part 192. PHMSA has designed special permit conditions to effectively assess and

remediate threats to the *special permit segments* and *special permit inspection areas*, including

assessments to evaluate pipe girth welds that have not been non-destructively tested, and any

pipe with inadequate pressure test or material records. To ensure FGT properly implements the

special permit conditions, FGT will be required to give PHMSA an annual review of their

compliance with the special permit.

PHMSA finds that no significant negative impact to human safety and the environment will

result from the issuance and full implementation of a special permit that waives the requirements

of 49 CFR 192.611(a) and (d) and 192.619(a) for class location changes to a Class 3 location.

This permit requires FGT to implement the special permit conditions which include safety

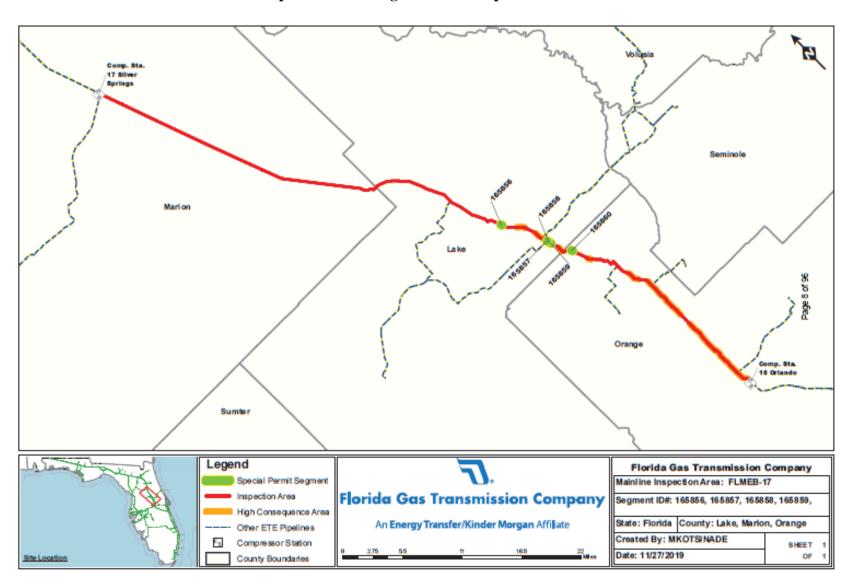
requirements on the operations, maintenance, and integrity management of the special permit

segments and the special permit inspection areas.

Completed in Washington DC on: March 31, 2022

Prepared by: PHMSA - Engineering and Research Division

Figure 1 – FGT 26-inch Mainline Loop CMPR STA 17-18 Special Permit Segments and Inspection Areas



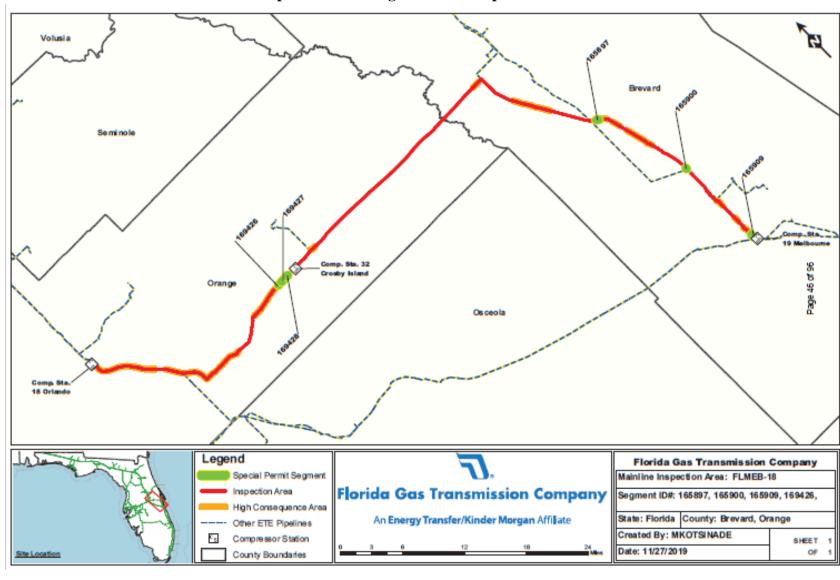


Figure 2 – FGT 26-inch diameter Mainline Loop STA18-STA19 Pipeline Special Permit Segments and Inspection Area

Figure 3 – FGT 30-inch MLV 18-1 to C/S 19 Pipeline Special Permit Segments and Inspection Area

