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-2020-0044

Requested By: Florida Gas Transmission Company, LLC

Operator ID#: 5304

Original Date Requested: February 21, 2020

Original Issuance Date: March 25, 2022

Effective Dates: March 25, 2022 to March 25, 2032

Code Section(s): 49 CFR 192.611(a)(3)(iii)

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 (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)(3)(iii) 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.

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. and is operated by Energy Transfer.

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)(3)(iii) for 7,418 feet (approximately 1.405 miles) of gas transmission pipelines located in Citrus, Hernando, Hillsborough, and Pasco 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	
St. Petersburg Sarasota Connector	18	1992	ERW-HF	Fusion Bonded Epoxy	X70	0.258	1333	1899	1.42	
West Leg	20	1004	DSAW	E ' D 11E	W70	0.430	1222	1920	1.45	
Station 26-27 MP 160.2	30	1994	SAW	Fusion Bonded Epoxy	X70	0.515	1322	1898	1.44	
West Leg Loop 36 2002 2006	DGAW E ' D 11E	V70	X70 0.515	1322	1879	1.42				
	30	2006	DSAW	Fusion Bonded Epoxy	Λ/0	0.313	1322	1925	1.46	

Note: ERW-HF is high frequency electric resistance weld. DSAW is double submerged arc weld. SAW is submerged arc weld.

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 or Class 2 to Class 3 location change.

Special Permit Request:

On February 21, 2020, FGT applied to PHMSA for a special permit seeking relief from 49 CFR 192.611 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 18-inch St. Petersburg Sarasota Connector, 30-inch West Leg Station 26-27, and 36-inch West Leg Loop Pipelines in Citrus, Hernando, Hillsborough, and Pasco 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 (SS) 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 Summary	Year Installed	Seam Type	MAOP (psig)	Design Factor
166334	18	St. Petersburg Sarasota Connector	1,156	54+60	66+16	Hillsborough, FL	1 to 3	1992	HF-ERW	1,333	0.67
166338	18	St. Petersburg Sarasota Connector	315	206+51	209+66	Hillsborough, FL	1 to 3	1992	HF-ERW	1,333	0.56
166340	18	St. Petersburg Sarasota Connector	132	406+43	407+75	Hillsborough, FL	1 to 3	1992	HF-ERW	1,333	0.56
166347	18	St. Petersburg Sarasota Connector	532	904+67	909+99	Hillsborough, FL	2 to 3	1992	HF-ERW	1,333	0.67
166349	18	St. Petersburg Sarasota Connector	456	1014+01	1018+57	Hillsborough, FL	2 to 3	1992	HF-ERW	1,333	0.67
166350	18	St. Petersburg Sarasota Connector	474	1079+72	1084+46	Hillsborough, FL	2 to 3	1992	HF-ERW	1,333	0.56
166352	18	St. Petersburg Sarasota Connector	259	1212+12	1214+71	Hillsborough, FL	2 to 3	1992	HF-ERW	1,333	0.56
166250	30	West Leg Station 26- 27 MP 160.2	1,004	1050+74	1060+78	Hernando, FL	2 to 3	1994	DSAW	1,322	0.67
166256	30	West Leg Station 26- 27 MP 160.2	318	1867+74	1870+92	Pasco, FL	2 to 3	1994	DSAW	1,322	0.67
166257	30	West Leg Station 26- 27 MP 160.2	165	1870+92	1872+57	Pasco, FL	2 to 3	1994	DSAW	1,322	0.67
166267	30	West Leg Station 26- 27 MP 160.2	861	3488+40	3497+01	Hillsborough, FL	2 to 3	1994	SAW	1,322	0.56
166114	36	West Leg Loop	1,252	104+57	117+09	Citrus, FL	2 to 3	2003	DSAW	1,322	0.67
166129	36	West Leg Loop	494	993+82	998+76	Hernando, FL	2 to 3	2007	DSAW	1,322	0.67

The *special permit segments* have a pipe design factor of 0.67 or less that meets 49 CFR 192.611(a)(1)(ii) for a Class location change to a Class 3 location. The minimum hydrostatic test pressure of these *special permit segments* does not meet the requirements of 49 CFR 192.611(a)(3)(iii). For a Class location change from a Class 1 or 2 to a Class 3 location to meet 49 CFR 192.611(a)(3)(iii), the MAOP must be based upon the minimum hydrostatic test pressure times 0.667. These *special permit segments* do not meet this minimum hydrostatic test pressure requirement and thus require a special permit.

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 169.7 miles of St. Petersburg Sarasota Connector, West

Leg Station 26-27, and West Leg Loop 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)			
FLMEF-26	166114, 166129	36	West Leg Loop	90.6	153.8	63.2			
FLMEE-26-27	166250, 166267, 166256, 166257	30	West Leg Station 26-27 MP 160.2	90.6	160.2	69.6			
FLBVW	166334, 166338, 166340, 166347, 166349, 166350, 166352	18	St. Petersburg Sarasota Connector	0.0	36.9	36.9			

The *special permit inspection areas* are located in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida.⁴ Attachments 1 through 3 are maps showing the 18-inch St. Petersburg Sarasota Connector, 30-inch West Leg Station 26-27, and 36-inch West Leg Loop Pipelines special permit segments and special permit inspection areas.

Public Notice:

On June 2, 2020, PHMSA posted a notice of this special permit request in the Federal Register (85 FR 33789) with a closing date of July 2, 2020. PHMSA received no relevant public comments concerning this special permit request through July 2, 2020.

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

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* include the *special permit segments*.

documents are available for review in Docket No. PHMSA-2020-0044 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. 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 *special permit segments* on the FGT 18-inch St. Petersburg Sarasota Connector, 30-inch West Leg Station 26-27, and 36-inch West Leg Loop 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 FGT *special permit segments* are externally coated with 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 St. Petersburg Sarasota Connector Pipeline is 18-inch diameter, 0.309-inch wall thickness, pipe strength of 70,000 psig, the pipe seam is high frequency electric resistance welded, and was constructed in 1992. The *special permit segment* pipe operates at or below 67% of SMYS at an MAOP of 1,333 psig.
 - The pipe for the *special permit segments* on the West Leg Station 26-27 Pipeline are 30-inch diameter, 0.430-inch and 0.515-inch wall thickness, pipe strength of 70,000 psig with a double submerged arc-welded pipe seam and was constructed in 1994. The *special permit segments* pipe operates at or below 56% or 67% of SMYS at an MAOP of 1,332 psig.
 - The pipe for the *special permit segments* on the West Leg Loop Pipeline are 36-inch diameter, 0.515-inch wall thickness, pipe strength of 70,000 psig with a double submerged arc-welded pipe seam, and was constructed in 2002. The *special permit segments* pipe operates at or below 67% of SMYS at an MAOP of 1,322 psig.
 - 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 Pipeline were pressure tested in 1992 at 1,899 psig for eight (8) hours.
 - The *special permit segments* on the West Leg Station 26-27 Pipeline were pressure tested in 1994 at 1,920 psig for eight (8) hours.
 - The *special permit segments* on the West Leg Loop Pipeline were pressure tested in 2003 at 1,879 psig for eight (8) hours.
 - FGT has met this requirement.
- 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 St. Petersburg Sarasota Connector Pipeline in 2009 and 2016.
- FGT ran ILI tools on the West Leg Station 26-27 Pipeline in 201 and 2017.
- FGT ran ILI tools on the West Leg Loop Pipeline in 2011 and 2019.
- 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.

- The *special permit segments* fall in the *probable acceptance* column of the criteria matrix for:
 - Class 2 to 3 location, pipe manufacturer, pipe material, design stress, coating type, girth welds, 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:
 - o Class 1 to 3 location, leaks and failures, CP, HCA program, and ILI program.

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					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 Florida Gas Transmission Company, Energy Transfer Company, Panhandle Eastern Company, Transwestern Pipeline Company, and Trunkline Gas Company 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 enforcement actions and civil penalties for Energy Transfer on these systems (operator identification numbers (OPID#) 5304, 32099, 15105, 19610, and 19730):

Table 6 - Energy Transfer 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	4	8	2	7	23		
OPEN	1	0	1	0	0	2		
Total	3	4	9	2	7	25		

Table 7 - Energy Transfer Enforcement Civil Penalty Status							
	1	1, 2011 through	,				
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected			
\$679,300	\$0	\$679,300	\$0	\$679,300			

Summary of enforcement findings for FGT, Energy Transfer Company, Panhandle Eastern Company, Transwestern Pipeline Company, and Trunkline Gas Company: 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 violations:

Table 8 - Summary of Enforcement Findings for Energy Transfer January 1, 2011 through June 15, 2021								
		Notice of Amend	dment					
OME Procedural Manual	8 Public Awareness 3				2			
Notice of Amendment Total:								
	Notice of Probable Violation							
Corrosion Control	4	OME Procedural Manual	3	Operation and/or Maintenance	9			
Operator Qualification	1	Integrity Management	7	Design	1			
		Notic	ce of Prob	able Violation Total:	25			
		Warning Lett	er					
Corrosion Control	3	Reporting	1	Transportation of Gas	1			
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 18-inch diameter St. Petersburg Sarasota Connector, 30-inch diameter West Leg Station 26-27, and 36-inch diameter West Leg Loop Pipelines in Citrus, Hernando, Hillsborough, and Pasco Counties, Florida, for approximately 1.405 miles of Class 1 or Class 2 location pipe in a Class 3 location and with pipe design factors at or below 0.72 is consistent with pipeline safety.

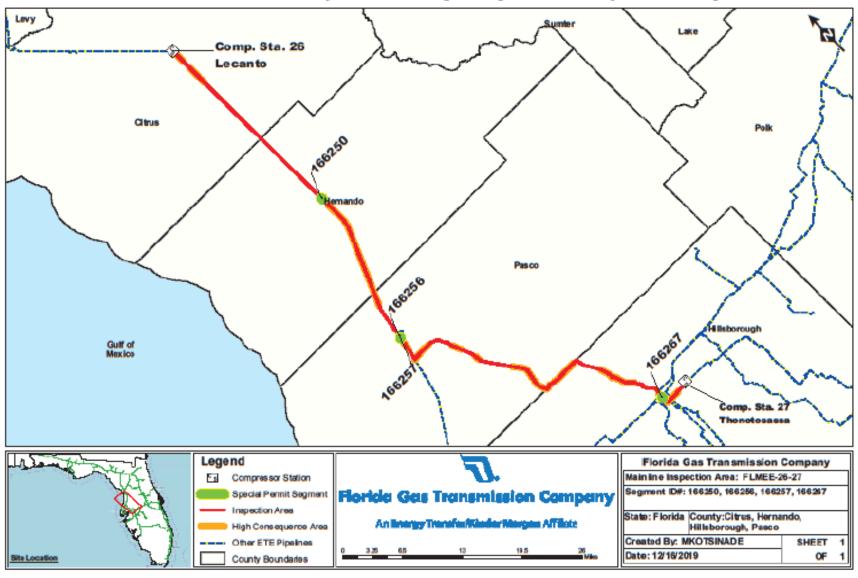
FGT's enforcement record does not reflect sustained and substantial noncompliance with 49 CFR Part 192. PHMSA has designed special permit conditions to effectively assess and remediate threats to the *special permit segments* and *special permit inspection areas*, including assessments to evaluate pipe girth welds that have not been non-destructively tested, any pipe with missing 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 the issuance and full implementation of this special permit, including its conditions, is consistent with pipeline safety. 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 25, 2022

Prepared by: PHMSA - Engineering and Research Division

Attachment 1 – FGT 30-inch West Leg Station 26-27 Pipeline Special Permit Segments and Inspection Areas

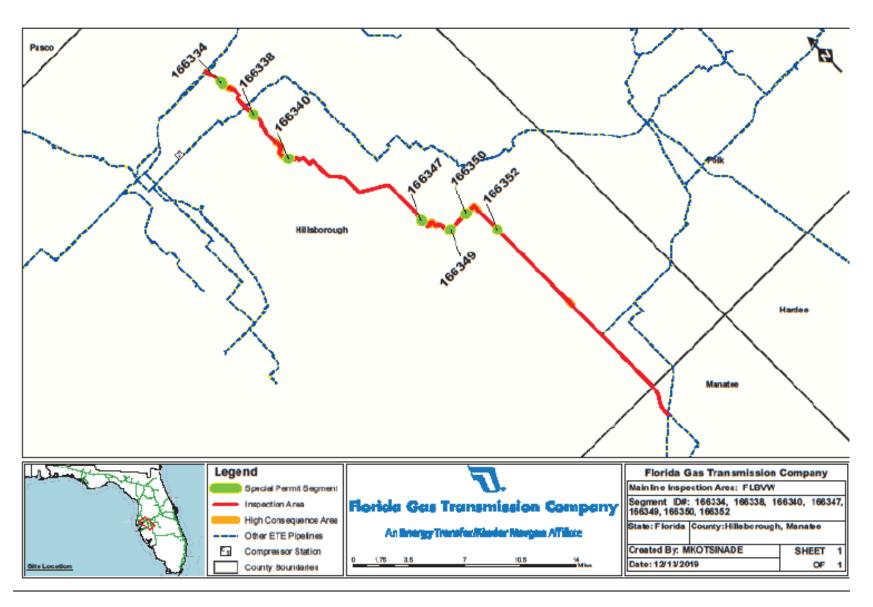


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Levy Lake Comp. Sta. 26 Lecanto Citrus Hernando **Gulf of** Lege nd Florida Gas Transmission Company Main line Inspection Area: FLMEF-26 Compressor Station Segment ID#: 166114, 166125, 166129 **Horida Gas Transmission Company** Special Permit Segment Inspection Area State: Florida County: Citrus, Hernando, Hillsborough, Pasco An Brangy Transfer/Kinder F High Consequence Area Created By: MKOTSINADE Other ETE Pipelines SHEET Date: 12/16/2019 County Boundaries **Site Location**

Attachment 2 - FGT 36-inch diameter West Leg Loop Pipeline Special Permit Segments and Inspection Area

Attachment 3 – FGT 18-inch St. Petersburg Sarasota Connector Pipeline Special Permit Segments and Inspection Area



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