U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION Special Permit Analysis and Findings Class 1 or 2 to Class 3 Location

Special Permit Information:

Docket Number:	PHMSA-2023-0022
Requested By:	Florida Gas Transmission Company, LLC
Operator ID#:	5304
Original Date Requested:	March 24, 2023
Original Issuance Date:	July 28, 2023
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, LLC (FGT), 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 three (3) *special permit segments* that have undergone changes from Class 1 to Class 3 and one (1) *special permit segment* that has undergone a change from Class 2 to Class 3. The Federal pipeline safety regulations in 49 CFR 192.611(a)(3)(iii) require natural gas pipeline operators to confirm or revise the alternative maximum allowable operating pressure (Alternative MAOP or MAOP) of a pipeline segment after a change in class location.²

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 The Class 1 to 3 or Class 2 to 3 location changes on the FGT pipelines have pipe with design factors in accordance with 49 CFR 192.620(a)(1) for Alternative MAOP. The *special permit segments* utilize alternate design factors from 49 CFR 192.620 per existing special permit PHMSA-2008-0077.

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 approximately 0.594 miles (3,135 feet) of gas transmission pipelines located in Hillsborough County, Florida.

Pipe specifications including outside diameter, year installed, seam type, coating type, pipe grade, wall thickness, 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	DSAW	FBE	X70	0.309	1,333	1,899	1.42		
West Leg Station 27 to Ft Myers	30	2000	DSAW	FBE	X70	0.429 / 0.515	1,333	1,900	1.43		

Note: DSAW is double submerged arc welded seam pipe. FBE is fusion bond epoxy external pipe coating.

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.

The *special permit segments* have a pipe design factor of 0.67 or 0.56 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 requires a special permit.³

³ An MAOP determined by the hydrostatic test pressure times 0.667 is the same as a "Pressure Test Factor" of 1.50. The *special permit segments* have been pressure tested to 1.42 or greater times the MAOP as noted in **Tables 1** and **2**.

Special Permit Request:

On March 24, 2023, FGT applied to PHMSA for a special permit amendment seeking relief from 49 CFR 192.611(a)(3)(iii) for the below-listed *special permit segments*, where a class location change occurred from the original Class 1 or Class 2 to a Class 3 location on the 18-inch diameter and 30-inch diameter gas transmission pipelines (Pipelines) located in Hillsborough County, 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 amendment 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	No. Dwellings	Year Installed	Seam Type/ External Coating	MAOP (psig) ⁴	Design Pressure / Test Factor
201350	18	St. Petersburg Sarasota Connector (18", 0.309", X70)	703	277+47	284+50	Hillsborough, FL	1 to 3	2	1992	DSAW/ FBE	1,333	0.56 / 1.42
188251	30	West Leg Station 27 to Ft Myers (30", 0.515", X70)	783	4105+18	4113+00	Hillsborough, FL	2 to 3	8	2000	DSAW/ FBE	1,333	0.56 / 1.43
188253	30	West Leg Station 27 to Ft Myers (30", 0.429", X70)	1,255	4200+34	4212+89	Hillsborough, FL	1 to 3	2	2000	DSAW/ FBE	1,333	0.67 / 1.43
188257	30	West Leg Station 27 to Ft Myers (30", 0.515", X70)	394	4445+98	4449+92	Hillsborough, FL	1 to 3	36	2000	DSAW/ FBE	1,333	0.56 / 1.43

Special Permit Inspection Areas:

The *special permit inspection areas*⁵ are defined as the area that extends 220 yards on each side of the centerline as shown in **Table 3 – Special Permit Inspection Areas**.

⁴ Pressure tests were conducted after July 1, 1965, see 49 CFR 192.619(a)(3) for applicability.

⁵ The *special permit inspection area* includes the *special permit segment(s)*.

	Table 3 – Special Permit Inspection Areas											
Special Permit Inspection Area Name	Special Permit Segment Number(s)	Outside Diameter (inches)	Line Name	Start Survey Station (SS)	End Survey Station (SS)	Length ⁶ (miles)						
FLBVW	201350	18	St. Petersburg Sarasota Connector	8+99	1951+01	36.9						
FLMEE27	188251, 188253, 188257	30	West Leg Station 27 to Ft Myers	3670+75	7924+64	80.4						

Public Notice:

On April 19, 2023, PHMSA posted a notice of this special permit request in the Federal Register (88 FR 24266) to Docket No. PHMSA-2023-0022 with a closing date of May 19, 2023. PHMSA received no comments on this special permit application during the comment period.

The FGT special permit amendment 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-2023-0022 in the Federal Docket Management System (FDMS) located on the internet at <u>www.Regulations.gov</u>.

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

⁶ 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.

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 regarding the FGT special permit request.
1) No pipeline segment 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 18-inch St. Petersburg Sarasota Connector and 30-inch West Leg Station 27 to Fort Myers where a change has occurred from a Class 1 or 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 FBE.
 - 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.
- No pipe segment 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 67% SMYS. The *special permit segments* operate under an Alternative MAOP Special Permit PHMSA-2008-0077.
 FGT must continue to implement all applicable conditions of Special Permit –
 PHMSA-2008-0077 unless the condition is less stringent than Special Permit –
 PHMSA-2023-0022. PHMSA emphasizes that the required conditions specified for the four (4) specific *special permit segments* and two (2) *special permit inspection areas* addressed here will control, superseding any inconsistent requirements applicable to these four (4) *special permit segments* and two (2) *special permit inspection areas* in special permit (PHMSA-2008-0077).
 - The pipe for the *special permit segment* 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 27 to Ft Myers 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 2000. The *special permit segments* operate at or below 56% or 67% of SMYS at an MAOP of 1,333 psig.
- FGT has met this requirement.
- Records must be produced that show a hydrostatic test to at least 1.25 x MAOP and 90% of SMYS.
 - The *special permit segment* on the St. Petersburg Sarasota Connector Pipeline was pressure tested in 1992 at 1,899 psig for 8 hours. The *special permit segments* on the West Leg Station 27 to Ft Myers Pipeline was pressure tested in 2000 at 1,900 psig for 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 for *special permit inspection area FLBVW* in 2009, 2016, and scheduled for 2023.
 - FGT ran ILI tools for *special permit inspection area FLMEE27* in 2010, 2018, and scheduled for 2024.
 - FGT has had no SCC findings or failures in the *special permit inspection areas*.
- 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 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 segment* has been compared to the class location change special permit criteria matrix as follows:

- The *special permit segments* fall in the *probable acceptance* column of the criteria matrix for:
 - Pipe manufacturer, pipe material, design stress, girth welds, pipe coating, test pressure, test failures, depth of cover, local geology, type service, pressure fluctuations, CP, 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, HCA program, and ILI program.
- The *special permit segments* fall in the *requires substantial justification* column of the criteria matrix for enforcement findings.
 - Energy Transfer and Kinder Morgan, Inc. are co-owners of FGT. Energy Transfers overall enforcement findings fall in the *requires substantial justification category*. FGT enforcement findings do not fall within this category.
 - FGT had two (2) stress corrosion cracking failures in September of 2020 on two
 (2) pipelines of older pipe vintages (low frequency electric resistance welded),
 different coating systems (Polyken tape), and was in Palm Beach and Seminole
 Counties, Florida.

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 segment* and *special permit inspection area*. 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

PHMSA-2023-0022 – Florida Gas Transmission Company, LLC Page 7 of 12 Special Permit Analysis and Findings – Class 1 to Class 3 Location - FL 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, 2013, through March 31, 2023:

From January 1, 2013, through March 31, 2023, FGT was cited in seven (7) enforcement actions with a total of \$197,200 in assessed civil penalties with \$853,700 awaiting order. PHMSA initiated two (2) Corrective Action Orders, two (2) Notices of Amendments, and three (3) Notices of Probable Violation against FGT.⁷

Table 4: FGT Enforcement Matters from January 1, 2013, through March 31, 2023									
Status	Corrective Action Order	Notice of Amendment	Notice of Probable Violation	Safety Order	Warning Letter	Total			
CLOSED	1	2	1	0	0	4			
OPEN	1	0	2	0	0	3			
Total	2	2	3	0	0	7			

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

Table 5: FGT Enforcement Civil Penalty StatusJanuary 1, 2013, through March 31, 2023								
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected				
\$1,050,900	\$853,700	\$197,200	-	\$197,200				

Summary of Enforcement Findings for FGT includes:

 Atmospheric Corrosion Control: Monitoring; Corrosion Control: Converted Pipelines; External Corrosion Control: Cathodic Protection and Test Stations; Integrity Management (IM): Addressing Integrity Issues, IM Baseline Assessments, Continual Process of Evaluation and Assessment, Knowledge and Training, Preventative and Mitigative Measures, Program Elements, and Threat Identification; OME Procedural Manual:

⁷ A final order in 4-2022-012-NOPV was issued on April 21, 20234/21/23, assessing \$19,300 civil penalty.

General; **Operations**: Emergency Plans, and MAOP-Steel or Plastic; **Reporting**: Immediate Reporting Incident.

49 CFR 191.5, 192.452, 192.463, 192.469, 192.479, 192.481, 192.605, 192.615, 192.619, 192.911, 192.915, 192.917, 192.921, 192.933, 192.935, and 192.937.

Table 6 below shows PHMSA's enforcement actions and civil penalties for FGT and the specific 49CFR Parts 191 and 192 violations:

Table 6: Summary of Enforcement Findings from FGTJanuary 1, 2013, through March 31, 2023								
		Notice of Amenda	ment					
Corrosion Control	1	Integrity Management	2	OME Procedural Manual	2			
Operation and/or Maintenance	1			· · ·				
			I	Notice of Amendment Total:	6			
		Notice of Probable V	iolatio	n				
Corrosion Control	2	Integrity Management 4 Operation and/or Maintenance		1				
Reporting	1							
			Notice	of Probable Violation Total:	8			
		Warning Lette	er					
Corrosion Control	1	Integrity Management	2	Reporting	1			
				Warning Letter Total:	4			
				Grand Total:	18			

Summary of Enforcement Findings for Energy Transfer Systems:

From January 1, 2013, through March 31, 2023, Energy Transfer, the operator of FGT, was cited in 33 enforcement actions with a total of \$737,000 in assessed civil penalties on its Energy Transfer Company (OPID 32099), FGT, Panhandle Eastern Pipeline Co (OPID 15105), Transwestern Pipeline Company LLC (OPID 19610), and Trunkline Gas Co (OPID 19730) pipeline systems. PHMSA issued two (2) Corrective Action Orders, 10 Notices of Amendment, 12 Notices of Probable Violation, one (1) Safety Order and eight (8) Warning Letters to Energy Transfer.

Tables 7 and 8 below show PHMSA's enforcement actions and civil penalties for EnergyTransfer on these pipeline systems.

Table 7: Energy Transfer Systems Enforcement Matters fromJanuary 1, 2013, through March 31, 2023

Status	Corrective Action Order	Notice of Amendment	Notice of Probable Violation	Safety Order	Warning Letter	Total
CLOSED	1	9	10	1	8	29
OPEN	1	1	2	-	-	4
Total	2	10	12	1	8	33

Table 8: Energy Transfer Enforcement Civil Penalty Status January 1, 2013, through March 31, 2023							
Proposed	Awaiting Order	Assessed	Withdrawn/Reduced	Collected			
\$1,590,700	\$853,700	\$737,000	-	\$737,000			

The type of 49 CFR Part 192 enforcement violations against Energy Transfer on these five (5) pipeline systems from January 1, 2013, through March 31, 2023, were as follows:

Summary of Enforcement Endings for Energy Transfer pipeline systems includes:

Atmospheric Corrosion Control: Monitoring; Corrosion Control: Converted Pipelines; Design: Compressor Stations Emergency Shutdown; External Corrosion Control: Cathodic Protection, Electrical Isolation, Monitoring, Test Leads, and Test Stations; Gas Transportation: Underground natural gas storage facilities; Integrity Management (IM): Addressing Integrity Issues, Baseline Assessment Plan, Conducting IM Baseline Assessments, Continual Process of Evaluation and Assessment, Elements and Implementation, Knowledge and Training, Low Stress Reassessment, Preventative and Mitigative Measures, Program Elements, Requirements of ICDA, Requirements of SCCDA, and Threat Identification; Maintenance: Pressure Limiting and Regulating Stations-Relief Devices, Record keeping, and Valve Maintenance Transmission Lines; OME Procedural Manual: General and Maintenance and normal operations; Operations: Emergency Plans, and MAOP-Steel or Plastic; Public Awareness: Comprehensive Media; Reporting: Immediate Reporting Incident; and Welding: Procedures.

49 CFR 191.5, 192.12, 192.167, 192.225, 192.452, 192.463, 192.465, 192.467, 192.469, 192.471, 192.479, 192.481, 192.605, 192.615, 192.616, 192.619, 192.709, 192.739, 192.745, 192.905, 192.907, 192.911, 192.915, 192.917, 192.919, 192.921, 192.927, 192.929, 192.933, 192.935, 192.937, and 192.941.

Table 9 below gives a complete summary of the findings and the specific 49 CFR Part 191 and192 violations:

Table 9: Summary of Enforcement Findings for ANR, TCO, CGT, GLGT, and PNGTS January 1, 2013, through January 22, 2023								
		Notice of Amendmen	t					
Corrosion Control	1	Integrity Management	9	OME Procedural Manual	3			
Operation and/or Maintenance	1	Public Awareness	3	Transportation of Gas	1			
				Notice of Amendment Total:	18			
		Notice of Probable Viola	tion					
Corrosion Control	4	Design	1	Integrity Management	6			
Operation and/or Maintenance	9	Reporting	1					
			Not	ice of Probable Violation Total:	21			
		Warning Letter						
Corrosion Control	3	Integrity Management	6	OME Procedural Manual	2			
Reporting	1	Transportation of Gas	1	Welding of Steel in Pipelines	1			
Warning Letter 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 Pipelines in Hillsborough County, Florida, for approximately 0.594 miles (3,135 feet) of Class 1 or Class 2 location pipe in a Class 3 location is consistent with pipeline safety. The pipe meets the design factors for the MAOP, but the *special permit segments* have not been pressure tested to 1.50 times the MAOP. The *special permit segments* have been tested to 1.42 or greater times the MAOP as shown **Table 2 – Special Permit Segments**.

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)(3)(iii) 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*. FGT will be required to implement the special permit conditions in the *special permit segments* and *special permit inspection areas*, which include areas along the pipeline where periodic integrity assessments are not required by 49 CFR Part 192.

Completed in Washington DC on: July 28, 2023

Prepared by: PHMSA - Engineering and Research Division