

**December 28, 2012**

**VIA CERTIFIED MAIL AND FAX TO: (404)832-1169**

Mr. Kelcy Warren  
Chief Executive Officer  
Energy Transfer Partners LP  
800 E. Sonterra Blvd., Suite 400  
San Antonio, TX 78258

**Re: CPF No. 2-2012-1005H**

Dear Mr. Warren:

Enclosed is a Corrective Action Order issued by the Associate Administrator for Pipeline Safety in the above-referenced case. It requires you to take certain corrective actions with respect to the operation of Florida Gas Transmission's FLMEA - 100 Line. The Corrective Action Order requires you to take immediate action to protect the public, property, and environment in connection with the failure of this pipeline on December 26, 2012 near Melbourne, Florida.

Service is being made by certified mail and facsimile. Your receipt of this Corrective Action order constitutes service of that document under 49 C.F.R. § 190.5. The terms and conditions of this Order are effective upon receipt. Please direct any questions on this matter to Wayne T. Lemoi, Director, Southern Region, OPS, at (404) 832-1160.

Sincerely,

Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

Enclosure

cc: Mr. Wayne T. Lemoi, Southern Region Director, OPS  
Mr. Ryan Coffey, Executive Vice President, Operations, Energy Transfer Partners LP

**U.S. DEPARTMENT OF TRANSPORTATION  
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION  
OFFICE OF PIPELINE SAFETY  
WASHINGTON, D.C. 20590**

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**In the Matter of** )

**Florida Gas Transmission Company, LLC,** )

**CPF No. 2-2012-1005H**

**Respondent** )  
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**CORRECTIVE ACTION ORDER**

**Purpose and Background**

This Corrective Action Order is being issued, under authority of 49 U.S.C. § 60112, to require Florida Gas Transmission Company, LLC (“Respondent” or “FGT”), to take the necessary corrective actions to protect the public, property, and the environment from potential hazards associated with a failure involving FGT’s FLMEA - 100 Line.

On December 26, 2012, a failure occurred on Respondent’s 20-inch line approximately 1.5 miles west of Melbourne, Florida, and 1.2 miles upstream of FGT’s Compressor Station 19, resulting in the release of natural gas. The cause of the failure has not yet been determined.

Pursuant to 49 U.S.C. § 60117, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety, Southern Region initiated an investigation of the incident. The preliminary findings of the investigation are as follows:

1. The “Affected Pipeline” means approximately 98.4 miles of FGT’s FLMEA - 100 line from FGT’s main line valve MLV 18-1 at Kissimmee Junction (Mile Post 683.3) through FGT’s Compressor Station 19 (Mile Post 734.5) near Melbourne, FL, to FGT’s Compressor Station 20 (Mile Post 781.7) near Fort Pierce, FL. The “Affected Pipeline” generally runs southerly and passes through portions of Orange, Osceola, Brevard, Indian River, and St. Lucie Counties, Florida.
2. The “Isolated Segment” means the 14.2-mile section of FGT’s FLMEA - 100 line from main line valve MLV 18-3 to main line valve MLV 18-4. The “Isolated Segment” is the portion of the “Affected Pipeline” that was shut-in after the

incident and that must remain shut-in pending an approved restart plan in accordance with Items 2 and 3.

3. The “Director” means the Director, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration (PHMSA) Southern Region. His address is 233 Peachtree Street, Suite 600, Atlanta, GA 30303.

### **Preliminary Findings**

- At approximately 5:55 am EST on December 26, 2012, a rupture occurred on Respondent’s FLMEA - 100 Line, resulting in a reported release of an undetermined volume of natural gas.
- Specifically, the failure occurred on Respondent’s FLMEA - 100 Line at Mile Post 733.2 approximately 1.5 miles west of Melbourne, Florida, and 1.2 miles upstream of FGT’s Compressor Station 19.
- FGT operates a 5,370 mile natural gas pipeline system that originates in Texas and delivers natural gas to consumers in the Southeast.
- The pipeline system includes an approximately 98.4 miles segment of FGT’s FLMEA - 100 line from FGT’s MLV 18-1 at Kissimmee Junction (Mile Post 683.3) through FGT’s Compressor Station 19 (Mile Post 734.5) near Melbourne, FL, to FGT’s Compressor Station 20 (Mile Post 781.7) near Fort Pierce, FL. The pipeline segment is a 20-inch line. It generally runs southerly and passes through portions of Orange, Osceola, Brevard, Indian River, and St. Lucie Counties, Florida. FGT’s FLMEA system in the section where the failure occurred also included a parallel line 300; at other points on the FLMEA system there may be other parallel pipelines.
- The failure resulted in the ejection of an approximately 20-ft section of 20-inch pipe which landed on the multi-pipeline right-of-way (ROW) approximately 15-feet from the failure location.
- Beginning at Kissimmee Junction approximately 14 miles south of Orlando, the pipeline’s ROW passes through rural areas where it parallels US-192 until Compressor Station 19 near Melbourne. Downstream of Compressor Station 19, the pipeline ROW parallels Interstate 95 to Compressor Station 20 near Fort Pierce. The ROW downstream of Compressor Station 19 runs through more populated areas inside the Melbourne City limits; and transitions to rural areas outside of the Melbourne City limits. The failure site is located in a rural pasture area, approximately 1.2 miles upstream of Compressor Station 19 near Melbourne.
- There were no injuries, evacuations or ignition. FGT reported the incident to the National Response Center on December 26, 2012 (NRC Report No. 1034170).

- There were no injuries, evacuations or ignition. FGT reported the incident to the National Response Center on December 26, 2012 (NRC Report No. 1034170).
- Following the December 26, 2012 failure, Respondent manually closed the main line valves (MLV 18-3) upstream of the failure site and (MLV 18-4) downstream of the failure site shutting-in the pipeline segment. No compressor stations were shut down because this is a multi-line system and the compressors were needed to continue gas supply in the other parallel pipelines.
- At the time of the incident, the estimated failure site operating pressure of the FLMEA - 100 Line was 927 psig. The reported maximum allowable operating pressure (MAOP) of this line segment is 936 psig.
- The FLMEA - 100 Line is currently shut-in between MLV 18-3 and MLV 18-4 and has not been returned to service. When it is returned to service the pressure will not exceed 741 psig.
- The FLMEA - 100 Line between Kissimmee Junction and Compressor Station 20 was constructed of 20-inch OD x 0.250-inch w.t., x-52 low frequency electric resistance welded (LF ERW) pipe manufactured by Youngstown Sheet and Tube in 1959. The protective coating in the immediate area of the failure is field applied tape.
- The pipe has not yet been visually examined because groundwater has filled the hole caused by the failure. Therefore, the hole must be de-watered before it can be entered.
- On February 28, 2012, Respondent inspected the pipeline from MLV 18-1 to Compressor Station 19 using a combination Hi-Resolution Magnetic Flux Leakage (MFL) and Caliper in-line inspection (ILI) tool. A Close Interval Survey on the pipeline from MLV 18-1 to Compressor Station 20 was performed in 2011.
- The FLMEA - 100 Line was hydrostatically tested from MLV 18-3 to Compressor Station 19 on April 6, 2000 at a minimum pressure of 1,235 psig for 8 hours.
- The cause of the failure is unknown and the investigation is ongoing.

### **Determination of Necessity for Corrective Action Order and Right to Hearing**

Section 60112 of Title 49, United States Code, provides for the issuance of a Corrective Action Order, after reasonable notice and the opportunity for a hearing, requiring corrective action, which may include the suspended or restricted use of a pipeline facility, physical inspection, testing, repair, replacement, or other action as appropriate. The basis for making the determination that a pipeline facility is hazardous, requiring corrective action, is set forth both in the above referenced statute and 49 C.F.R. §190.233, a copy of which is enclosed.

Section 60112, and the regulations promulgated thereunder, provide for the issuance of a Corrective Action Order without prior opportunity for notice and hearing upon a finding that failure to issue the Order expeditiously will result in likely serious harm to life, property or the environment. In such cases, an opportunity for a hearing will be provided as soon as practicable after the issuance of the Order.

After evaluating the foregoing preliminary findings of fact, I find that the continued operation of Respondent's FLMEA - 100 line from FGT's main line valve MLV 18-1 at Kissimmee Junction (Mile Post 683.3) through FGT's Compressor Station 19 (Mile Post 734.5) near Melbourne, FL, to FGT's Compressor Station 20 (Mile Post 781.7) near Fort Pierce, FL without corrective measures would be hazardous to life, property and the environment. Additionally, after considering the age of the pipe, circumstances surrounding this failure, the proximity of the pipeline to populated areas and public roadways the hazardous nature of the product the pipeline transports, the pressure required for transporting the material, the uncertainties as to the cause of the failure, and the ongoing investigation to determine the cause of the failure, I find that a failure to issue this Order expeditiously to require immediate corrective action would result in likely serious harm to life, property, and the environment.

Accordingly, this Corrective Action Order mandating immediate corrective action is issued without prior notice and opportunity for a hearing. The terms and conditions of this Order are effective upon receipt.

Within 10 days of receipt of this Order, Respondent may request a hearing, to be held as soon as practicable, by notifying the Associate Administrator for Pipeline Safety in writing, delivered personally, by mail or by telecopy at (202) 366-4566. The hearing will be held in Atlanta, Georgia or Washington, D.C. on a date that is mutually convenient to PHMSA and Respondent.

After receiving and analyzing additional data in the course of this investigation, PHMSA may identify other corrective measures that need to be taken. Florida Gas Transmission Company, LLC will be notified of any additional measures required and amendment of this Order will be considered. To the extent consistent with safety, Respondent will be afforded notice and an opportunity for a hearing prior to the imposition of any additional corrective measures.

### **Required Corrective Action**

Pursuant to 49 U.S.C. § 60112, I hereby order Florida Gas Transmission Company, LLC to immediately take the following corrective actions:

1. FGT must not operate the Isolated Segment until authorized to do so by the Director.
2. Prior to resuming operation of the Isolated Segment, FGT must develop and submit a written return-to-service plan for prior approval to the Director. The

return-to-service plan must include actions to confirm the integrity of the Isolated Segment. The return-to-service plan must also address incremental pressure increases and the patrolling of the Isolated Segment following each pressure increment. The return-to-service plan should specify a day-light restart and include advance communications with local emergency response officials.

3. After receiving authorization from the Director to restart the Isolated Segment, the pressure must not exceed 741 psig along the Isolated Segment and the Affected Pipeline. This pressure restriction will remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Director pursuant to Items 15 or 16.
4. The operating pressure along the Affected Pipeline must not exceed eighty percent (80%) of the actual operating pressure in effect immediately prior to the December 26, 2012 failure. FGT must reduce and maintain a 20% pressure reduction in the operating pressure along the entire length of the Affected Pipeline. This pressure restriction is to remain in effect until written approval to increase the pressure or return the pipeline to its pre-failure operating pressure is obtained from the Director pursuant to Items 15 or 16. By January 7, 2013, FGT must provide the Director a listing of the actual operating pressures at Kissimmee Junction and at Compressor Stations 18 and 19 on the FLMEA – 100 Line at the time of the failure and the intended reduced discharge pressure settings at these same locations (or other locations) to comply with the pressure restriction.
5. Within 15 days following receipt of this Order, FGT must submit a report to the Director identifying sections of the Affected Pipeline where any buildings intended for human occupancy are within the Potential Impact Radius (as defined in 49 C.F.R. § 192.903), all road and railway crossings, all High Consequence Areas (as defined in 49 C.F.R. § 192.903), and all Class 2, 3 and 4 locations.
6. Within 30 days of receipt of this Order, FGT must perform an aerial instrument or ground instrumented leakage survey of the Affected Pipeline. FGT must investigate all leak indications and remedy all leaks discovered. FGT must submit documentation of this survey to the Director within 45 days of receipt of this Order.
7. Within 45 days of receipt of this Order, FGT must complete mechanical and metallurgical testing and failure analysis of the failed pipe, including analysis of soil samples and any foreign materials. Complete the testing and analysis as follows:

- A. Document the chain-of-custody when handling and transporting the failed pipe section(s) and other evidence from the failure site;
  - B. Utilize the mechanical and metallurgical testing protocols, including the testing laboratory approved by the Director;
  - C. Prior to commencing the mechanical and metallurgical testing, provide the Director with the scheduled date, time, and location of the testing to allow a PHMSA representative to witness the testing; and
  - D. Ensure that the testing laboratory distributes all resulting reports in their entirety (including all media) whether draft or final, to the Director at the same time as they are made available to FGT.
8. Within 90 days following receipt of this Order, FGT must complete a failure root cause analysis (RCA) for the December 26, 2012, incident that is supplemented by an independent third-party acceptable to the Director. Elements of the RCA must include but are not limited to: a scoping document of the RCA; procedures associated with RCA; the methods used for the analysis and updates on each method as it progresses; and, a study and analysis of factors that may have contributed to the failure. The RCA must document all contributory factors and the decision-making process. Submit a final report of the RCA results to the Director including any lessons learned and whether the findings are applicable to other locations and pipelines within the FGT system.
9. Within 90 days of receipt of this Order, FGT must submit to the Director for approval an Integrity Verification and Remediation Plan (IVRP) to investigate, evaluate, and remediate the FLMEA – 100 Line pipeline. Once the IVRP is approved and implemented, FGT must modify the IVRP as necessary to incorporate the results of actions undertaken pursuant to this Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities or such modifications may be required by the Director. Submit any such plan modifications to the Director for prior approval. The Director may approve plan modifications incrementally. Any and all changes to the IVRP will be explained and documented in the CAO Documentation Report (CDR) described in Item 11 below. The IVRP will include, at a minimum, the following actions:
- A. Identify pipe in the Affected Pipeline with characteristics similar to the contributing factors identified for the December 26, 2012, failure;

- B. Perform an evaluation of the Affected Pipeline based on the findings of the mechanical and metallurgical study performed as required by Item 7 and of the RCA required by Item 8. [Note: While the IVRP and RCA are both due in 90 days, it is anticipated that the IVRP will be modified, if required, by the results of the RCA if unknown at the time the IVRP is initially submitted.]
- C. Determine if conditions similar to those contributing to the failure are likely to exist elsewhere on the Affected Pipeline;
- D. Develop and implement an integrity testing plan, which must address all factors known or suspected in the failure and consider all available information including, but not limited to, comparison of previously conducted internal inspection tool results, cathodic protection testing, or other integrity verification information. The plan may include but is not limited to:
- i. internal inspection tool surveys;
  - ii. pressure testing; and
  - iii. coating surveys.
- E. The plan must include remedial actions and the criteria FGT will use to determine excavation and repair of anomalies and imperfections. Should the cause be found to be corrosion, the following criteria must be used for corrosion anomalies:
- i. Immediate response or repair: Any anomaly within a pipeline operating up to 72% SMYS that meets either: (1) a Failure Pressure Ratio (FPR) equal to or less than 1.1; or (2) an anomaly depth equal to or greater than 80% wall thickness loss.
  - ii. One-year response or repair: Any anomaly that meets either: (1) an FPR less than design factor – for Class 1 location- FPR equal to or less than 1.39; for Class 2 location – FPR equal to or less than 1.67; and for Class 3 location – FPR equal to or less than 2.0; or (2) an anomaly depth equal to or greater than 60% wall thickness loss.
  - iii. Any anomaly for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with §§ 192.5 and 192.611 that meets either: (1) an anomaly FPR equal to or less than

the FPR of the original Class location ; or (2) an anomaly depth equal to or greater than 50% wall thickness loss.

iv. Monitored response: Any anomaly that meets both: (1) an FPR less than design factor – for Class 1 location – FPR greater than 1.39; Class 2 location – FPR greater than 1.67; and for Class 3 location – FPR greater than 2.0; and (2) an anomaly depth less than 60% wall thickness loss.

v. Any anomaly repairs for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with §§ 192.5 and 192.611 that meets both: (1) an anomaly FPR greater than the FPR of the original Class location; and (2) an anomaly depth less than 50% wall thickness loss.

- F. The type of internal inspection tools or other testing used must be technologically appropriate for assessing the system based on the cause of failure that occurred on December 26, 2012. FGT may use previous testing results if approved by the Director, provided the results of the testing are analyzed with regard to the factors known or suspected to have caused the December 26, 2012 failure.
- G. Provide to the Director a detailed description of the inspection and repair criteria to be used in the field evaluation of the anomalies that are excavated - to include a description of how any defects are to be graded (if appropriate) and a schedule for repairs or replacement;
- H. Remediation of the pipe in the Affected Pipeline identified as having the potential to fail as soon as conditions permit. Focus on areas where there is a potential threat to life, property or the environment;
- I. Provide a proposed schedule for completion of the actions required by paragraphs (A) through (H) of this Item.
10. Once approved by the Director, the IVRP will be incorporated into this Order, and FGT will implement the IVRP.
11. FGT must create and revise, as necessary, a CAO Documentation Report (CDR). When FGT has concluded all the items in this Order it will submit the final CDR in its entirety to the Director. This will allow the Director to complete a thorough review of all actions taken by FGT with regards to this Order prior to approving the closure of this Order. The CDR will capture summations of all activities and

the documentation associated with this Order in one document. It must include but not be limited to:

- A. Table of Contents;
  - B. Summary of the pipeline failure of December 26, 2012, and the response activities;
  - C. Summary of pipe data/properties and all prior assessments of the Affected Pipeline;
  - D. Summary of the testing and analysis required by Item 7 above;
  - E. Summary of the RCA with all root causes as required by Item 8 above;
  - F. Documentation of all actions taken by FGT to implement the IVRP as required by Item 9 above along with the results of those actions. Include the investigation and remediation criteria employed by FGT while implementing the IVRP;
  - G. Documentation of any modifications to the IVRP as necessary to incorporate the results of actions undertaken pursuant to this Order and whenever necessary to incorporate new information obtained during the failure investigation and remedial activities;
  - H. Lessons learned while completing this Order;
  - I. A path forward describing specific actions FGT will take on its entire pipeline system as a result of the lessons learned from work on this Order, and
  - J. Appendices (if required).
12. Submit quarterly reports to the Director that: (1) include all available data and results of the testing and evaluations required by this Order, and (2) describe the progress of the repairs or other remedial actions being undertaken. The first quarterly report for the period from December 26, 2012, through March 31, 2013, must be submitted by April 30, 2013. Each subsequent quarterly report must be submitted by the last day of the month following the last month of the quarter; e.g. July 31, 2013, for the second quarter of 2013, and October 31, 2013, for the third quarter of 2013.

13. It is requested but not required that FGT maintain documentation of the costs associated with implementation of this Order. Include in each quarterly report submitted, the to-date total costs associated with: (1) preparation and revision of procedures, studies and analyses; (2) physical changes to pipeline infrastructure, including repairs, replacements and other modifications; and (3) environmental remediation, if applicable.
14. With respect to each submission that under this Order requires the approval of the Director, the Director may: (a) approve, in whole or part, the submission; (b) approve the submission on specified conditions; (c) modify the submission to cure any deficiencies; (d) disapprove in whole or in part, the submission, directing that FGT modify the submission, or (e) any combination of the above. In the event of approval, approval upon conditions, or modification by the Director, FGT must proceed to take all action required by the submission as approved or modified by the Director. If the Director disapproves all or any portion of the submission, FGT must correct all deficiencies within the time specified by the Director, and resubmit it for approval.
15. The Director may allow the permanent removal of the pressure restriction set forth in Item 4 upon a written request from FGT demonstrating that the hazard has been abated and that restoring the pipeline to its pre-failure operating pressure is justified based on a reliable engineering analysis showing that the pressure increase is safe considering all known defects, anomalies and operating parameters of the pipeline.
16. The Director may allow the temporary removal or modification of the pressure restrictions set forth in Item 4 upon a written request from FGT demonstrating that temporary mitigative and preventive measures are implemented prior to and during the temporary removal or modification of the pressure restriction. The Director's determination will be based on the failure cause and provision of evidence that preventative mitigative actions taken by the operator provide for the safe operation of the pipeline segment during the temporary removal or modification of the pressure restriction. Appeals to determinations of the Regional Director in this regard will be decided by the Associate Administrator for Pipeline Safety.

The Director, Southern Region, may grant an extension of time for compliance with any of the terms of this Order upon a written request timely submitted demonstrating good cause for an extension.

The actions required by this Order are in addition to and do not waive any requirements that apply to Respondent's pipeline system under 49 C.F.R. Part 192, under any other order issued to Respondent under authority of 49 U.S.C. § 60101 et seq., or under any other provision of Federal or State law.

Respondent may appeal any decision of the Director to the Associate Administrator for Pipeline Safety. Decisions of the Associate Administrator are final.

Failure to comply with this Order may result in the assessment of civil penalties and in referral to the Attorney General for appropriate relief in United States District Court pursuant to 49 U.S.C. § 60120.

The terms and conditions of this Corrective Action Order are effective upon receipt.

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Jeffrey D. Wiese  
Associate Administrator  
for Pipeline Safety

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Date Issued