



LEAF RIVER

ENERGY CENTER LLC

53 Riverside Avenue • Westport, CT 06880
phone 203.557.1000 • fax 203.557.0577

March 21, 2014

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
233 Peachtree Street
Ste. 600
Atlanta, GA 30303
Attn: Wayne T. Lemoi, Director, Office of Pipeline Safety,
PHMSA Southern Region

**RE: Leaf River Energy Center LLC
Notice of Probable Violation and Proposed Compliance Order
CPF 2-2014-1002**

Ladies and Gentlemen:

Leaf River Energy Center LLC (LREC) has reviewed the Notice of Probable Violation (the Notice) and Proposed Compliance Order (the Proposed Order) dated February 20, 2014 issued by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), Southern Region, Office of Public Safety. LREC received the Notice and Proposed Order on February 24, 2014 and makes this response within the 30-day response period outlined in the Notice.

The Notice discussed eight probable violations, four of which were designated as warning items and four of which were designated as being subject to the Proposed Order. This response first discusses the warning items and then reviews the Proposed Order requirements.

Warning Items

1. §192.465 External Corrosion Control; Monitoring.

PHMSA Comment:

LREC did not test its pipeline under cathodic protection at least once each calendar year but with intervals not exceeding 15 months.

LREC conducted a cathodic protection (CP) commissioning survey in February 2011, followed by a cathodic protection survey in September 2012. The time span between the commissioning survey and the follow-on CP survey was 19 months, which exceeded the testing requirements of at least once each calendar year, but with intervals not exceeding 12 months.

LREC Response:

LREC acknowledges that the interval for CP testing in 2012 exceeded that specified in §192.465(a). LREC conducted its 2013 CP testing in August and October 2013, within the required 15-month interval, and has instituted steps to ensure that CP testing will be conducted in a timely manner for 2014 and future periods.

2. §192.465 External Corrosion Control; Monitoring.

PHMSA Comment:

LREC did not inspect each rectifier at least six times each calendar year, but with intervals not exceeding 2½ months, to insure that it is operating.

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At the time of the PHMSA inspection, LREC did not provide inspection records or any other documentation to demonstrate it had conducted rectifier inspections in calendar year 2012.

LREC Response:

LREC has been unable to locate documentation with regard to rectifier inspections during calendar year 2012 or the first six months of calendar 2013 as required pursuant to §192.465(b). In July 2013, LREC hired a new Vice President, Plant Operations, who implemented changes in LREC's inspection, maintenance and record keeping programs. In February 2014, LREC hired a new Director, Safety & Compliance, who is responsible for overseeing LREC's compliance calendar and certain regulatory requirements. The processes implemented by these employees are designed to ensure that required inspections are carried out in a timely manner and that appropriate records of all inspections, including corrective actions if any, are maintained.

4. §192.605 Procedural manual for operations, maintenance, and emergencies.

PHMSA Comment:

LREC did not follow its procedures because it did not maintain records for emergency response training conducted.

LREC's Emergency Response Manual (ERM), Section 6 Training and Evaluation, requires LREC to maintain records of emergency response training and evaluations for every LREC employee and contractor for a period of 5 years. However, LREC did not follow its procedures and did not maintain records of emergency response training conducted for its operating personnel and contractors.

LREC Response:

The ERM referenced by PHMSA was adopted in September 2013. The prior versions of the ERM required training, but did not have a record keeping requirement (see, for example, Attachment 1, page 12). LREC notes that §192.605(b)(2), which requires that operating personnel be trained to ensure that they are knowledgeable of emergency procedures, does not expressly mandate that the operator maintain written records of training in emergency response procedures. Consequently, LREC does not believe that the omission of a written record keeping requirement from prior versions of its ERM, and its failure to maintain records of emergency response training conducted under those prior ERM versions, constitute violations of §192.605.

LREC has implemented procedures to ensure that appropriate records of emergency response training and evaluation for every LREC employee and contractor are maintained in a manner consistent with its current ERM requirements.

6. §192.709 Transmission lines: Record keeping.

PHMSA Comment:

LREC did not maintain a record of each inspection and test required by subparts L and M of Part 192 for at least 5 years or until the next inspection or test was completed, whichever was longer.

LREC did not prepare and maintain a record for the inspection and testing of its compressor station overpressure protection system. At the time of the inspection, LREC did not provide records for the inspection and testing in 2012 of its PLC overpressure protection system.

LREC Response:

LREC has been unable to locate documentation with regard to its PLC overpressure protection system during calendar year 2012 as required pursuant to §192.709(c). LREC has records of inspection with regard to its PLC overpressure protection system for 2013, and has implemented procedures to ensure that required inspections are carried out in a timely manner and that appropriate records of all inspections, including corrective actions if any, are maintained.

Proposed Compliance Order

3. §192.475 Internal corrosion control: General.

PHMSA Comment:

LREC transported gas in its storage field pipeline but did not investigate the corrosive effects of the gas it transported nor did LREC determine if steps were necessary to minimize internal corrosion.

LREC operates a natural gas storage field and pipelines. LREC investigated the corrosive effects of the pipeline quality gas it transports between its compressor station and pipeline interconnects with other natural gas transmission pipelines, but LREC did not investigate the corrosive effects of the gas for the pipelines between the compressor station and the storage caverns or on the storage field piping nor did it determine if steps needed to be taken to minimize internal corrosion.

Proposed Compliance Order Items 1 and 5:

1. *In regard to Item 3 of the Notice pertaining to LREC's failure to investigate the corrosive effects of gas on its pipeline and determine steps necessary to minimize internal corrosion,*
 - a. *[Within 30 days of receipt of the Final Order] LREC must investigate the corrosive effects of gas on the pipelines between the compressor station and the storage caverns or storage field piping.*
 - b. *[Within 60 days of receipt of the Final Order] LREC must determine what steps are necessary, if any, to minimize internal corrosion on the pipelines between the compressor station and the storage caverns or storage field piping based on its investigation of the corrosive effects of the gas in item 1a, above.*
 - c. *[Within 120 days of receipt of the Final Order] LREC must implement the steps that are determined to be necessary, if any, to minimize internal corrosion on the pipelines between the compressor station and the caverns or storage field piping determined in Item 1b.*

- 5.d. *Within 150 days of receipt of the Final Order LREC must provide written documentation confirming the completion of [Item 1] to the Director, Office of Pipeline Safety, PHMSA Southern Region.*

LREC Response:

LREC engaged a third party advisor to assist in implementing a program for investigating the corrosive effects of gas on the pipelines between the compressor station and the storage

caverns. After reviewing various options, LREC installed corrosion coupons on the piping for each of the storage cavern wells in February 2014. During the first three months following installation, the advisor will review results of the coupon monitoring on a monthly basis to assess the corrosive effects of gas on the subject piping. After such time, the advisor will recommend a permanent schedule for pulling the coupons and reviewing the data.

LREC also recently acquired an ultrasonic testing (UT) instrument to read the thickness of its storage field piping. LREC is developing a testing program, including a baseline survey of the site and comparison to original piping specifications, which it will implement in April 2014. Following the initial baseline inspection, LREC intends to conduct UT on specific aboveground sections of the storage field piping on a quarterly basis and will maintain records of such testing with the other inspection records for the facility.

LREC intends to address this matter within the timeline specified in the Proposed Order, and will supply appropriate documentation as required under the Final Order.

5. §192.605 Procedural manual for operations, maintenance, and emergencies.

PHMSA Comment:

LREC's O&M manual and local procedures did not include procedures for starting up and shutting down its pipeline system.

LREC did not have procedures for starting up and shutting down its pipeline in a manner to assure operation within the MAOP (maximum allowable operating pressure) limits, plus the build-up allowed for operation of pressure-limiting and control devices. LREC's O&M manual, Section 2.9 Pipeline Shutdown/Startup Procedures only stated that "Procedures will be developed by local supervisory personnel and followed for critical operations of the pipeline." Local procedures were not available.

Proposed Compliance Order Items 2 and 5:

2. *In regard to Item 5 of the Notice pertaining to LREC's failure to develop and maintain procedures for starting up and shutting down its pipeline system, LREC must develop and maintain written procedures for starting up and shutting down its pipeline to assure operation within the Maximum Allowable Operating Pressure limits, plus build-up allowed for operation of pressure-limiting and control devices.*
5. *LREC must complete the above [item] within the following time [requirement]:*
 - a. *Within 30 days of receipt of the Final Order LREC must complete the requirements of [Item 2] above.*

- b. *Within 150 days of receipt of the Final Order LREC must provide written documentation confirming the completion of [Item 2] to the Director, Office of Pipeline Safety, PHMSA Southern Region.*

LREC Response:

LREC developed and implemented pipeline startup and shutdown procedures and related compressor startup and shutdown procedures responsive to this item in November 2013. A copy of the procedures, since revised, is included as Attachment 2. LREC acknowledges that the referenced procedures were not prepared at the time of the PHMSA inspection.

However, with these procedures now in place and implemented, LREC believes it has fully addressed this item and asks that the final Compliance Order omit this item.

7. §192.743 Pressure limiting and regulating stations: Capacity of relief devices.

PHMSA Comment:

LREC did not adequately demonstrate that the relief devices on its pipeline system met capacity requirements.

LREC's 2012 and 2013 inspection records documented relief valve capacities less than LREC's required capacity. LREC's construction job books contained the required relief valve capacity determined for each relief valve, and the designated relief valves capacity, for natural gas. The relief capacity (determined by air) for LREC's relief valves on the 2012 and 2013 [inspection reports] are less than the required capacity for the following two valves:

Relief Valve	Capacity (SFCM)			
	Required	Design	2012 Determination	2013 Determination
PSV-0101C	555,556	568,580.5	494,258	494,258
PSV-388	555,556	568,580.5	160	494,258

Proposed Compliance Order Items 3 and 5:

- 3. *In regard to Item 7 of the Notice pertaining to LREC's failure to demonstrate that installed relief devices met capacity requirements, LREC must perform capacity calculations for each installed pressure relieve device to demonstrate the relief calculations for each installed pressure relief device meets the capacity requirements for the conditions under which it operates*
- 5. *LREC must complete the above [item] within the following time [requirement]:*
 - c. *Within 30 days of receipt of the Final Order LREC must complete the requirements of [Item 3] above.*

- d. *Within 150 days of receipt of the Final Order LREC must provide written documentation confirming the completion of [Item 3] to the Director, Office of Pipeline Safety, PHMSA Southern Region.*

LREC Response:

LREC has confirmed with the manufacturer that the construction job book requirement for testing the capacity of pressure limiting valves for natural gas is the applicable standard for the specified valves. LREC also has confirmed that the vendor who tested the valves in 2012 and 2013 used air capacity in completing the calculation of capacity for the specified valves in those periods, based on the data tag for each such valve. That vendor is in the process of adding a notation to each of the prior reports reconciling the air test results to those for natural gas, and will include the reconciliation information in future reports.

LREC intends to address this matter within the timeline specified in the Proposed Order, and will supply appropriate documentation as required under the Final Order.

8. §192.805 Qualification Program

PHMSA Comment:

LREC did not identify certain Operator Qualifications (OQ) covered task and did not ensure that individuals performing OQ covered tasks were qualified.

LREC's pipeline system has interconnects with Tennessee Gas Pipeline, Destin Pipeline Company, Transcontinental Gas Pipeline Company, Southern Natural Gas Company, Midcontinent Express Pipeline, and Gulf South Pipeline Company where the other pipeline companies may operate and maintain equipment that affects the operation or integrity of LREC's pipeline.

LREC had not determined what OQ covered tasks performed by the other pipeline company personnel affect the operation or integrity of its pipeline system, and had not determined that the individuals performing the covered tasks were qualified.

Proposed Compliance Order Items 4 and 5:

4. *In regard to Item 8 of the Notice pertaining to LREC's failure [to] identify Operator Qualification covered tasks and ensure individuals performing covered tasks were qualified,*
 - a. *LREC must determine the OQ covered tasks performed by other pipeline personnel that affect the operation or integrity of LREC's pipeline.*
 - b. *LREC must ensure that all personnel performing OQ covered tasks that affect the operation or integrity of LREC's pipeline are qualified or directed and observed by an individual that is qualified.*
5. *LREC must complete the above [item] within the following time [requirement]:*
 - e. *Within 30 days of receipt of the Final Order LREC must complete the requirements of [Item 4] above.*
 - *****
 - f. *Within 150 days of receipt of the Final Order LREC must provide written documentation confirming the completion of [Item 4] to the Director, Office of Pipeline Safety, PHMSA Southern Region.*

LREC Response:

LREC has reviewed all of its interconnection agreements and has identified which equipment is owned, maintained and operated by LREC, which is owned, maintained and operated by another pipeline company and which may be owned by one entity, but operated or maintained by the other company. Based on this review, LREC has identified the overpressure protection equipment at each of the meter sites as being critical to the operation and integrity of LREC's pipelines, and that OQ covered tasks 26 (Inspect, test and calibrate pressure limiting device) and 42 (Performing maintenance on valves) are applicable to this equipment.

Based on this review, LREC has determined that:

- LREC owns and maintains the overpressure protection equipment at each of the interconnections with Tennessee Gas Pipeline, Destin Pipeline Company and Transcontinental Gas Pipe Line Company. Inspection, testing, calibration and maintenance of the overpressure protection equipment will be conducted by a

qualified LREC employee and records of inspection and maintenance will be maintained as required.

- There is no overpressure protection equipment installed at the Midcontinent Express Pipeline (MEP) meter site because the MAOP of LREC's pipeline and MEP's pipeline is the same (1,480 psi).
- Each of Southern Natural Gas Company and Gulf South Pipeline Company owns, operates and maintains the overpressure protection equipment located at their respective meter sites. LREC has made arrangements with each pipeline company to receive at least 48 hours' notice of all testing to be done on the overpressure protection equipment at such sites, to have a qualified LREC employee present to observe and, as such employee deems necessary, direct the tests, and to receive and sign off on copies of the inspection reports. Records of inspection and maintenance will be maintained as required.

LREC intends to address this matter within the timeline specified in the Proposed Order, and will supply appropriate documentation as required under the Final Order.

PHMSA Compliance Order Item 6:

6. *It is requested (not mandated) that LREC maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director, Office of Pipeline Safety, PHMSA Southern Region. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.*

LREC Response:

LREC will voluntarily submit the information requested following its satisfactory compliance with the requirements of the Final Order.

LREC is committed to addressing these matters in a timely manner. If you have any questions or concerns regarding this response or LREC's compliance with PHMSA requirements, please contact LREC's interim General Counsel, Katherine Ellis, at kellis@leafriverenergycenter.com, 203-557-1005 (work) or 713-854-5480 (cell), or LREC's Director, Safety & Compliance, John Pepper, at jpepper@leafriverenergycenter.com, 769-553-0022, ext. 107 (work) or 601-507-1609 (cell).

Sincerely yours,



Mark A. Fullerton
Chief Executive Officer

Enc.

Attachment 1 – LREC Emergency Response Manual adopted June 2012

Attachment 2 – LREC Pipeline Startup and Shutdown Procedures and LREC Compressor Engine Startup and Shutdown Procedures

Cc (via email): Katherine Ellis (LREC)
John Pepper (LREC)
Mike Martin (LREC)
James Bowe (King & Spalding)
Brian Gistand (PHMSA)