CenterPoint Energy

Southeast Supply Header, LLC
1111 Louisiana, Suite 1120
Houston, Texas 77002

November 2, 2011

Wayne T. Lamoi, Director
Office of Pipeline Safety Southern Region
233 Peachtree Street Ste. 600
Atlanta, GA 30303

RE: CPF 2-2011-1008

Dear Mr. Lamoi,

This letter is written in response to the *Notice of Probable Violation, Proposed Civil Penalty and Proposed Compliance* CPF 2-2011-1008 (NOPV) date October 4, 2011, which was received by Southeast Supply Header, LLC (SESH) on October 7, 2011. The NOPV was issued as the result of the inspection of SESH's records and procedures in Shreveport, LA, from May 3-7, 2010, and inspection of SESH's pipeline facilities from Delhi, LA, to Coden, AL, from August 2-5, 2010.

SESH is not contesting the findings of the inspection and has sent the civil penalty of $174,500 to the sender bank Monday morning, October 31, 2011 and instructed that the funds be wired November 4, 2011.

While not contesting, SESH is submitting additional information for the nine items below.

The following is a list of items that your correspondence indicated that SESH had probable violations:

1. **§ 191.5 Immediate notice of certain incidents.**
   (a) At the earliest practicable moment following discovery, each operator shall give notice in accordance with paragraph (b) of this section of each incident as defined in §191.3.

   SESH did not give notice of the pipeline incident that occurred on Line 100 on January 21, 2010, near Hazlehurst, MS, in accordance with §191.5(b) at the earliest practicable moment following discovery. The *National Response Center (NRC) Incident Report #929301* indicates the incident was discovered on January 21, 2010, at 12:29 local time (CST) but not reported to the NRC by SESH until January 21, 2010, at 21:09 (EST); more than 7-1/2 hours after the discovery.

The supplemental/final written *Incident Report-Gas Transmission and Gathering Pipeline Systems* (#2010010 - 15178) SESH submitted to PHMSA on February 9, 2011, conveyed the following timeline on January 21, 2010.

- A power company employee reported to the SESH Control Center at 12:30 hours (24-hour clock) bubbles in water that had pooled along SESH's right-of-way
- SESH employee arrived on site at 13:30 hours and suspected the pipeline may have a pinhole leak
- Location was excavated at 19:25 hours and the leak was confirmed as a girth weld leak

Additional Information: *§191.5 requirement is to "At the earliest practicable moment following discovery, each operator shall give notice . . . of each incident as defined in §191.3. §191.3 defines an incident as:*

(1) An event that involves a release of gas from a pipeline or of liquefied natural gas or gas from an LNG facility and

(i) A death, or personal injury necessitating in-patient hospitalization; or
(ii) Estimated property damage, including cost of gas lost, of the operator or others, or both, of $50,000 or more.

(2) An event that results in an emergency shutdown of an LNG facility.
(3) An event that is significant, in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2).

Nowhere in §191.3 is an incident defined as just a leak but rather a release of gas and discovery of certain types of events, and the notification requirement of §191.5 is of an incident. Based upon those definitions, below is a review of the summary of events leading up to the notification of NRC report #929301

At 12:30, a power company employee reported bubbles in water that had pooled along SESH's right-of-way (at this point we only have bubbles in water in a rural area)
At 13:30, SESH employee arrived on site and suspected a possible pinhole leak (possible leak, no discovery that it is a leak or it belong to SESH yet and definitely not an incident – no death, no personal

injury necessitating in-patient hospitalization, no estimate of damage of $50,000 or more)
At 19:25, after excavation the leak was discovered and confirmed as a girth weld leak on SESH pipeline.
At 21:09, while at 19:25 we still just had a leak with no death or no injury necessitating in-patient hospitalization, the damage was evaluated that it could have the potential of being $50,000 or more due to the repair method and large diameter pipe so a call was made to the NRC within 2 hours of discovery

2. **§ 191.15 Transmission and gathering systems: Incident report.**
. . . (b) Where additional related information is obtained after a report is submitted under paragraph (a) of this section, the operator shall make a supplemental report as soon as practicable with a clear reference by date and subject to the original report.

SESH did not make a supplemental report as soon as practicable upon obtaining additional information related to the pipeline incident discovered on January 21, 2010, near Hazlehurst, MS. The original written incident report submitted to PHMSA on February 19, 2010 (#201000010-15010) showed the incident cause as unknown, and *"still under investigation, cause of Incident to be determined* (*Supplemental Report required)."*

On May 23, 2010, SESH received a metallurgical failure investigation final report from Kiefner & Associates, Inc. (KAI) (Final Report No. 10-031). The KAI report concluded the cause of the leaking girth weld was Hydrogen Assisted Cracking. SESH did not submit a supplemental report with this additional information to PHMSA until January 21, 2011, (report # 2010010-15162); 8 months after SESH obtained the information.

Additional information: *SESH does not contest that there was a significant time between the receipt of a final report from Kiefner as to the cause of the SESH girth weld leak on January 21, 2010 and the Final Supplemental report filed on January 21, 2011. But we would like to reemphasize that in the months that followed the incident PHMSA made numerous requests for additional data, reports, tests, repairs, and meetings with both Spectra and CenterPoint (SESH is a joint venture) together and independently that resulted in problems keeping up with what information had been delivered to PHSMA. No information was withheld intentionally from PHMSA as can be demonstrated by responses to requests that were provided by SESH, including the Kiefner report on or about May 28. It was also during this time that due to having received the Kiefner report, SESH did attempt to file the supplemental report, however the new electronic 7100.2 incident form included a new series of questions related to the type of "incident cause." A request was made to Jamerson Pender and copied to Dallas Rea on July 30,*

2010 asking for explanation of the information being requested. SESH did not receive a reply until August 13, 2010. However, it was not until Dallas Rea asked whether SESH had filed a supplemental report in January of 2011 that we realized that actually updating the report been overlooked. SESH immediately filed a supplemental report on January 21, 2011.

3. **§192.167 Compressor stations: Emergency shutdown.**
(a) Except for unattended field compressor stations of 1,000 horsepower (746 kilowatts) or less, each compressor station must have an emergency shutdown system that meets the following:
... (2) It must discharge gas from the blowdown piping at a location where the gas will not create a hazard.

The blowdown piping vents for SESH's Emergency Shutdown (ESD) systems at the five SESH compressor stations were not configured so as to discharge gas at locations where the gas would not create a hazard.

During the PHMSA inspection, the inspector observed and took pictures of ESD trip station vents near the compressor buildings and at other locations that were directed horizontally at an elevation of approximately 6 to 8 feet, where vented natural gas could create a hazard to individuals near the trip station in the event of ESD activation.

Additional Information: *SESH is modifying the ESD trip station blowdown piping to direct the vented gas vertically to eliminate the possible hazard noted in the NOPV. This work is expected to be completed by November 30, 2011.*

4. **§ 192.243 Nondestructive testing**
... (b) Nondestructive testing of welds must be performed:
(1) In accordance with written procedures; ...

SESH did not properly nondestructively test girth welds in accordance with its written procedures. SESH's Specification *Number:* CS-GC *8.2. General Construction-Welding and Tie-Ins (Spec. Number:* CS-GC *8.2) Item 4D* stated, all *"welds (excluding ECA welds) including repairs are evaluated to workmanship standards of acceptability of API 1104, Section 9."*

SESH's construction radiographs of the two girth welds listed below show a crack present in each weld. However, SESH's nondestructive testing (NDT) technician (a contractor) did not identify and reject either of these girth welds during construction radiographic reviews as required by SESH's written procedures. Both girth welds were installed in Line 100 despite not meeting API II 04 workmanship standards of acceptability.

- Girth weld no. XRA-078 at station #4616+78 was discovered to be leaking on January 21, 2010. The source of the leak was a longitudinal crack. Upon discovery of the leak, SESH and PHMSA used independent NDT consultants to re-review the construction radiographs. Both NDT

consultants identified the crack and concluded the crack should have been identified and rejected by the NDT technician at the time of the original construction radiographic NDT evaluation.

- Girth weld no. XRA-047 at station #4366+51 was identified as having a transverse crack upon re-examination of the construction radiograph by SESH's NDT consultant and by PHMSA's NDT consultant. The crack was confirmed by examination of the girth weld by SESH's contract metallurgical consultant after the girth weld was removed from the pipeline. Additionally, PHMSA's in-house NDT/welding expert reviewed a photograph of the referenced construction radiograph and concluded that the crack should have been identified by the NDT technician at the time of the original construction radiographic NDT evaluation.

SESH did not comply with its written NDT examination procedures because it did not adequately and correctly record NDT inspections and tests as required by the procedures. SESH's NDT technician incorrectly completed *Form TS-406 NDE Report of Field Welds* (TS-406) as follows:

- *TS-406* dated February 14, 2008, had incorrect dimensions for four inspected girth welds. The report showed the welds were 42" x 0.750" x 0.600" transition welds when the correct dimensions were 42" x 1.000" x 0.600." Also, the report indicated Radiographic Procedure *42 x 600 x 750 GI* was used when no such qualification record was provided to PHMSA by SESH as it relates to this weld.
- *TS-406* dated January 21, 2008, had incorrect dimensions of girth weld no. XRA-047. The report showed the weld was a 42" x 0.720" x 0.750" transition weld when the correct dimensions were 42" x .600" x 0.750." Also, the report had an incorrect radiographic procedure number. SESH conveyed to PHMSA that it could not definitively determine which, if any, qualified radiographic procedure was actually used to radiograph girth weld no. XRA-047.

Additional Information: *SESH hires qualified radiographic inspection contractors for all projects. All radiographic technicians must have the appropriate qualifications to work on SESH projects. As noted by PHMSA, crack features in the subject welds were not called-out by the qualified radiographic technician during the construction of the SESH project.*

Also, as noted by PHMSA in the NOPV, the technician improperly documented the radiographic inspection procedure used for certain welds. It should be noted, however, that the radiographic procedure used did produce radiographs of the subject welds in which the film quality, density and sensitivity met all requirements of API 1104. Following their

b

radiographic film review, Oak Ridge National Laboratory, PHMSA's consultant, stated in their report "except for the welds rejected for film artifacts and low density, . . . film quality, density, sensitivity, was acceptable per API 1104 19th Edition".

To prevent reoccurrence of the issues noted in the NOPV, SESH has enhanced its existing Quality Assurance/Quality Control (QA/QC) practices. SESH now requires NDE suppliers to have an established QA/QC Procedure and/or a Quality Management System with a continuous improving process. The procedure or system must have, at a minimum, elements of an auditing and reporting procedure.
The below listing highlights key features of the enhanced requirements:

- ***Quality Assurance Procedure for Auditing Nondestructive Testing Personnel:*** *NDT personnel will be audited at intervals as described below in order to supply and maintain a qualified workforce of nondestructive testing technicians for our customers.*
- ***Personnel Audit Frequency:*** *For personnel that have been successfully tested and certified by as a Level II NDT technician, an audit will be conducted at the beginning of the Technician's first assigned project and at quarterly periods thereafter.*
- ***Auditor Qualifications:*** *Qualified managers and supervisors will be designated field auditors for their ability to understand the reviewed task requirements. Auditors will have a minimum of 5 years experience as a Level II or Level III in the method(s) they assess.*
- ***Personnel Audit Checkpoints:*** *Reviewer's findings on checkpoints applicable to the test method and work being performed will be documented on the QA Personnel Audit Form. Focus will be to confirm compliance with procedures, client specifications, and government regulations.*
- ***QA Audits may be conducted at the same time as other audits, such as radiation safety inspections.***

    - ***Audit Results:*** *If any audit reveals the technician has failed to perform an NDT task in accordance with applicable codes and standards, SESH procedures, and/or client specifications, the technician's qualifications will be reviewed and may be suspended. Unsatisfactory results will be immediately reported to the Radiographic Contractor Corporate Level III who shall then*

determine whether the employee shall be retrained, retested, discharged, or a combination of retested and retrained. Any reinstated employee will subsequently be audited at the beginning of their first reassignment.

- ***Field Audit Frequency:*** *An Audit will be performed within the 1st week of commencement, and at intervals not to exceed one month.*
- ***Audit Checkpoints:*** *Auditing will be conducted to ensure all company specifications, API 1104 20th edition, and NRC regulations are followed.*
- ***Additional Commitments:*** *Radiographic qualification procedures/techniques will be reviewed and approved by a level III technician.*
- ***Records:*** *A copy of auditor's report will be turned into the chief inspector or SESH representative at job site. Should the audit reveal any areas for improvement or any unsatisfactory results, a copy must be sent to the appropriate designated SESH Area Office to the attention of the Construction Area Manager.*

SESH has also enhanced its inspector training program and documentation process to address these issues, as described below.

- *SESH inspectors are required to attend an enhanced project specific training. Detailed training for the inspector's assigned task includes, but is not limited to, specifications, documentation, and procedures.*
- *Updated training materials have been developed to focus on the issues identified in this NOPV.*
- *SESH has further enhanced the field QA/QC review of 49 CFR Part 192 documentation and daily inspection reports. The documentation is reviewed by Subject Matter Experts (SME) while the Construction project is ongoing to ensure 49CFR Part 192 compliance documents are completed correctly by the field inspection staff. Errors and/or omissions found are noted by the SMEs and submitted back to the field inspectors to be corrected and resubmitted for verification. This process also identifies additional training requirements that are needed to be conducted during the project.*
- *SESH performs independent audits to ensure compliance with; construction policies, procedures, guidelines, and processes which have the potential to have a material effect on the quality of constructed projects.*

Many of the practices described above were in place at the time of the SESH construction. The enhancements will provide a more rigorous and formal process to ensure the quality of the facilities.

5. 192.303 Compliance with specifications or standards.
Each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.

SESH did not construct Line 100, a transmission line, in accordance with its written specifications or standards. SESH had two qualified procedures regarding the use of radiographic film for NOT of girth welds:

1) *Construction Specification, Spec. Number: CS-GCJJ.2 Radiography* (CS-GC31.2), which required the use of Class I or GI film with gamma radiation sources for penetration thicknesses (excluding weld build-up) less than 0.750 inches (18mm).

2) SESH approved its radiographic contractor's (JANX) *Radiographic Inspection Procedure* on November 16, 2007. This procedure required Class I film to be used on wall thicknesses up to and including 0.750 inches.

While the above were the two SESH approved procedures for radiographic film, SESH's records showed that JANX used different radiographic procedures during the construction of Line 100. The procedures JANX used allowed for the use of Class II (07 Agfa) radiographic film (not Class I or GI film) when shooting with penetration thicknesses and/or wall thicknesses of less than or equal to 0.750 inches. That is, JANX routinely used Class II (07 Agfa) film in the gamma-sourced radiographic inspection of manually produced girth welds on the SESH pipeline where penetration and/or wall thicknesses were less than 0.750 inches. Class II film is inferior to Class I film in the ability to detect some defects and imperfections.

SESH also did not construct Line 100 in accordance with *Specification Number:* CS-GC *8.2 Item JG.* For girth weld transitions, *Item JG* required the internal transition slope on transition welds to be a minimum of 1:4 (14 degree angle) and maximum of 1:2.6 (21 degree angle). SESH's contracted investigation report indicated the two induction bend-end welds on the bend located at construction survey station no. 4583+53 (failed weld bend) had maximum transition angles that exceeded 21 degrees. The report indicated maximum transition angles of 37 degrees and 34 degrees for these bend welds.

Additional Information: *SESH Specification CS-GC31.2, "Radiography", provided the general requirements applicable to radiographic inspection for the SESH Project. The JanX Radiographic Inspection Procedure was written prior to the start of the project to meet the requirements of CS-GC31.2. CS-GC31.2 specified the use of Class I film for penetration thicknesses less than 0.750 inches. CS-*

GC31.2 does not specify a method for the approval of job specific variances, who has the authority to approve such variances or how these variances are to be documented.

JanX performed the radiographic inspection on the SESH Project. As part of this work, JanX was expected to develop and qualify specific radiographic procedures based on the pipe diameter, wall thickness range, radiation source and the other factors specified in CS-GC31.2, Section 3A (provided to PHMSA via e-mail on February 15, 2010), taking into consideration job specific conditions, available radiation sources, production rates and other factors.

JanX utilized Class II film for radiographic inspection of the bend to transition pup girth welds. The weld in question is a transition from 1.00" w.t. to 0.600" w.t. The use of Class II film meets the requirements of CS-GC31.2 for this weld configuration when inspected using a double wall exposure/single wall viewing (DWE/SWV) technique, as the penetration thickness would have been 1.20 inches. However, CS-GC31.2 would require Class I film for this weld configuration using a single wall exposure/single wall viewing (SWE/SWV) technique, unless a specific variance was approved. In the case of the cracked girth weld, a SWE/SWV technique was used. SESH has not found any documentation that a variance from CS-GC31.2 to allow the use of Class II film was requested or approved. However, a variance may have been verbally approved by the SESH lead welding inspector.

While a specific variance from CS-GC31.2 was not documented, each specific radiographic procedure was qualified and approved by SESH. CS-GC31.2 requires a Radiographic Qualification Record (Form TS-053.0) be completed and approved for each radiographic procedure, based on radiographic technician, pipe diameter, wall thickness, geometric arrangement, film type and numerous other parameters (see CS-GC31.2, Section 3). As shown on the Radiographic Qualification Records for Spread 1, Rig A (provided to PHMSA via e-mail on February 18, 2010), the use of Class II film with a SWE/SWV technique for this weld configuration did provide acceptable results per API 1104 requirements and was approved by the SESH welding inspector.

The use of Class II film for the radiographic inspection did result in film quality that meets the requirements of API 1104. One of the

observations from the film review conducted by Oak Ridge National Laboratory was "Except for the welds rejected for film artifacts and low density, . . . film quality, density, sensitivity, was acceptable per API 1104 19th edition". The audit conducted by the SESH radiographic consultant, Dave Russell, also concluded the film quality met API 1104 requirements. (See letter from Russell NDE Systems Inc. dated Feb. 10, 2010, previously provided.) Mr. Russell commented the Class II film used for internal radiographs of transition welds was an appropriate film choice, stating:

"The Latitude of the film determines its ability to image a variation in wall thickness. Films with good latitude can image a greater range of wall thickness than film types with poor latitude. In general, the faster the film is, the better is its latitude. The film used on the SESH project was Agfa-Gevaert D7 which is a relatively fast film with good latitude."

As a part of the investigation of this issue, SESH re-inspected a number of welds using both Class I and Class II film. For all welds re-inspected using both film types, the Class II film revealed all actionable weld features as the Class I film. As noted by Oak Ridge National Laboratory, the Class II film met the film quality, density and sensitivity requirements of API 1104. As noted by Mr. Russell, a film with good latitude, such as the Class II film used, can image a greater range of wall thickness than a film with poor latitude. Since the induction bend to pup welds are transition welds, SESH believes the Class II film was an appropriate film choice. While Class I film may be a better quality film, there is no indication that any actionable defect was not identifiable by the Class II film. Thus SESH disagrees with PHMSA's statement "Class II film is inferior to Class I film in the ability to detect some defects and imperfections".

In summary, the use of Class II radiographic film met the film quality, density and sensitivity requirements of API 1104. However, the use of Class II film for penetration thickness less than 0.750 inches did not meet SESH Specification CS-GC31.2. A documented variance from this requirement should have been requested and approved, but no such variance was documented. CS-GC31.2 does not specify a process for variance, which likely contributed to the lack of a documented variance in this case.

To prevent reoccurrence of the issues noted in the NOPV, SESH has enhanced its QA/QC practices. See the response to Finding #4, above, for a description of QA/QC enhancements that have been implemented.

6. **§ 192.305 Inspections: General.**
Each transmission line or main must be inspected to ensure that it is constructed in accordance with this part.

SESH did not adequately inspect Line 100 a transmission line, to ensure that it was constructed in accordance with Part 192.

SESH did not follow its construction inspection specifications for girth weld XRA-078. *Specification Number:* CS-GC *8.2 Item 3D* and SESH form *TS-713 Transition Report* required wall thickness readings to be *"taken on the quarter points of the transitioned pipe and this information is recorded on Form TS-713 and submitted for Company approval. Method of measurement shall be approved by Company."* Form *TS-713* also required minimum and maximum transition slopes to be recorded and had a signature/date block for the Chief Inspector to sign.

SESH's *TS-713* report form for girth weld XRA-078, dated February 18, 2008,

- Showed measured transition slope angles of 16 degrees (min) and of 20 degrees (max). These min/max angles were inconsistent with the angles measured and reported in SESH's contracted fail investigation report.
- Showed the wall thickness measurements taken at the quarter points were all nominal size numbers, indicating that actual wall thicknesses were not measured.
- Was not signed by the chief inspector.

SESH also did not adequately inspect girth weld XRA-075 to ensure it complied with weld specifications. *CS-GC8.2 Item 3F* conveyed that the weld transition shall be acceptable if *"Internal pipe misalignment is evenly distributed around the circumference of the pipe."* Also, the *Pipeline Construction Inspection Manual- Inspector Responsibilities* stated that Welding/ Tie-in Inspector duties include (item *5113) "Visually inspects each weld for ... high-/low... and genera/weld appearance."*

Girth weld XRA-075 (42" x 1.000" x 0.600" bend/pup transition weld) was observed and photographed by a PI-IMSA inspector on August 3, 2010, at SESH's contracted metallurgical consultant's shop; Kiefner & Associates, Inc. (KAI). The photographs indicate a (scaled) outside diameter (OD) misalignment of approximately 0.40 inches at one position and essentially zero misalignment directly opposite (I 80 degrees circumferentially from) the misalignment. This is consistent with the OD misalignment measurements taken by SESH on the weld. Moreover, these measurements indicate the internal pipe misalignment was not evenly distributed around the circumference of the pipe; and thus, the weld was either inadequately inspected, or was not inspected, for internal pipe misalignment.

Additional Information: *To prevent reoccurrence of the issues noted in the NOPV, SESH has enhanced its QA/QC and documentation practices as described below.*

- *SESH inspectors are required to attend an enhanced project specific training. Detailed training for the inspector's assigned task includes, but not limited to, specifications, documentation, and procedures.*
- *SESH has further enhanced the field QA/QC review of DOT documentation and daily inspection reports. The documentation is reviewed by SMEs while the Construction project is ongoing to ensure compliance documents are completed correctly by the field inspection staff. Any errors and/or omissions found are noted by the SMEs and submitted back to the field inspectors to be corrected and resubmitted for verification. This also identifies additional training requirements that are needed to be conducted during the project.*

Specific training is being developed for proper completion of the weld transition form (Form TS-713). Particular attention given to this form will help field personnel gain a comprehensive understanding of the information required and assure that the TS-713 is completed correctly.

- *SESH performs independent audits to ensure compliance with: construction policies, procedures, guidelines, and processes which have the potential to have a material effect on the quality of constructed projects.*

To provide additional guidance regarding segmenting induction bends, a Joint Industry Project (JIP), "Welding of Field Segmented Induction Bends and Elbows for Pipeline Construction", has been initiated. The JIP is developing:

- *Guidance regarding the specification and purchase of segmentable fittings*
- *Guidance for field construction practices*
- *Guidance for segmented fittings in existing pipelines*

This JIP is intended to provide detailed, responsible guidance on the segmentation and installation of fittings and induction bends. When the JIP has completed its work, SESH will incorporate applicable JIP guidance and recommendations into its specifications for future SESH projects.

7. **§ 192.317 Protection from hazards.**
(a) The operator must take all practicable steps to protect each transmission line or main from washouts, floods, unstable soil, landslides, or other hazards that may cause the pipeline to move or to sustain abnormal loads. . . .

SESH did not take all practicable steps to protect its Line 100, a transmission line, during construction. A buckle was discovered in the pipe at survey station no. 4389+68 during an unrelated excavation approximately 19 months after the pipeline was placed in service. SESH's contracted investigation report stated that the buckle *"was caused by excessive bending loads applied to the pipeline during some phase of the construction of the pipeline."* The report also stated that the "*. . . mode of buckling is associated with little or no pressure in the pipeline at the time the buckle formed. This implies that the buckle was probably present when the pipeline was hydrostatically tested."* Although the report conveys that *"insufficient information* is *available to provide certainty with respect to the cause,"* it is evident from the investigation report, and from the geometry tool ILI vendor's final report which indicated that an actionable anomaly (5.3% dent) existed at the buckle location approximately one month after the construction hydrostatic test, that SESH did not take steps during the construction of the pipeline to prevent the buckle from occurring.

Additional Information: *SESH had comprehensive Construction Specifications and Inspection Procedures in place during the construction of the SESH Pipeline. These included all reasonably practicable requirements intended to protect the pipeline from damage. The Onshore Pipelines Construction Specification CS-PL 1.5 addresses Scope, Dust Control, Clearing, Grading, Fencing, Trenching & Excavation, Rock Excavation, Stringing & Handling, Bending, Welding & Tie-Ins, Non-Destructive Examination, Bolt Torquing & Tensioning, Painting & Coating, Buoyancy Control, Lowering-In, Depth of Cover, Tile repair, Padding, Backfill, Watercourse Crossings, Bored & Tunneled Crossings, Slip Boring, Horizontal Directional Drilling, Pressure Testing, Pipeline Removal & Abandonment, Pipeline Cleaning, Inspection, & Repairs, Clean-Up, Meter Stations, Buildings, Grout, Plain & Reinforced Concrete, Structural Welding, Site Cleanup, Pneumatic Instrumentation Materials & Installation, Electrical installation & Materials and Concrete Encased PVC Conduit Installation.*

The cause of the buckle and when it occurred has not been determined. The possibility of damage to the pipeline during the construction process is one of the reasons the regulations require a hydrostatic test, where the pipe was pressured to a level equal to or greater than 1.25 times its MAOP (for this segment of pipe, the test pressure was in excess of 100% of the pipe specified

minimum yield strength). The section of pipe with the buckle passed this hydrostatic test without failure. Additionally, SESH ran a caliper tool in the pipeline to detect any deformations that had occurred during construction. Unfortunately, the buckle specified in this finding was not identified or remediated prior to placing the line in service, as discussed in the response to Finding #3 in CPF 2-2011-1007.

SESH believes it had implemented all reasonably practicable measures in place during the construction of the SESH pipeline to protect it from hazards. It also appears this is effectively a duplicate of Finding #3 in CPG 2-2011-1007. However, in the interest of closing this finding, SESH will not contest it.

To further enhance SESH's procedures relating to protection from hazards, SESH has amended its construction specifications, as described below:

SESH Specification CS-PL1.5 – Construction Specification - Onshore Pipelines:

6A8 - Trenching and Excavating: *Added the following language: "The trench bottom is excavated to provide continuous support for the pipeline and is free of foreign material detrimental to piping and coating."*

15E1 - Lowering In: *Added the following requirement: "The supports are to be spaced approximately 15 feet apart (on center) and each point of contact is to be laterally continuous for a minimum of approximately 3 feet."*

8. **§192.709 Transmission lines: Record keeping.**
Each operator shall maintain the following records for transmission lines for the periods specified:
. . . (c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 5 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.

SESH did not adequately document the inspection and test of a compressor station relief device as required by §192.731. That is, SESH did not document the *"as-left" pressure* of the Delhi compressor station Unit No. I High *Discharge Pressure Shutdown Setpoint* test, performed on November 3, 2009, on the inspection and test record.

Additional Information: *SESH did perform the inspection and test of the Delhi Compressor Station Unit #1 relief device. Technicians found and left the set pressure at 1,350 pounds, but did not document the "As Left Reading." The Company's Maintenance Management System personnel are in the*

process of investigating programmatic changes that would require the "As Left Reading" to be populated in order to close the associated work order. In addition, a QA/QC report was developed to be run monthly to show any "As Left Reading" that are left blank so they can be corrected. Communication will be made to technicians performing this task, that regardless if the "As Found" and "As Left" values are the same, both entries must be filled in.

9. **§192.745 Valve maintenance: Transmission lines.**
(a) Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year.

SESH did not adequately inspect and partially operate the three remotely controlled transmission mainline valves during its 2009 annual valve inspections. SESH did not test the functionality of the SCADA remote control system to assure the valves operated when remotely initiated and did not test the gas-powered operator component to assure that gas power would operate the valve. These valves, located at MP 55.79 (BV65685), MP 155.9 (BV65774), and MP 166.7 (BV 65789) might be required during an emergency and are required to be remotely controlled per Special Permit Condition No. 23.

Additional Information: *While not contesting this NOPV, SESH does feel this should have been an NOA. In 2009, SESH tested the valves located at MP 55.79 (BV65685), MP 155.9 (BV65774), and MP 166.7 (BV 65789), by partially operating them manually per our procedures and as stated in§192.745. However, during the inspection the inspector expanded the interpretation of §192.745 to not only include the valve being partially operated, but all methods that could be used to operate the valve tested as well. Immediately following the inspection and upon expansion of the interpretation of the test requirements, a SESH Site Specific HCA RCV testing procedure was created. An Emergency Management of Change procedure review was conducted by SME's and training provided to the team members prior to the valve tests. All three valves were tested on 8/17/10. Testing included remote, gas powered and hydraulic (manual) operation capabilities. The site specific procedure was provided to your office on August 27, 2011. Testing requirements were revised in the Company's Maintenance Management System to ensure all three methods of valve operation is tested.*

SESH believes in a safety culture and is committed to the continuous improvement and effectiveness of our pipeline safety programs as exhibited by the steps taken to address the issues identified in this response.

If you have any questions concerning the actions we have taken, please feel free to give me a call.

Sincerely,

Walter Ferguson
Division Sr. VP MidStream Field Operations, Engineering & Construction

CC: Pete Kirsch
Chris Bullock
Royce Brown
Johnny Cavitt