U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, D.C. 20590

JUN - 2 2009

Mr. Eric Amundsen
Vice President, Technical Services
Panhandle Energy
5444 Westheimer Road
Houston, TX 77056

Ref. No. PHP08-0016

Dear Mr. Amundsen:

On February 6, 2009, you wrote to the Pipeline and Hazardous Materials Safety Administration (PHMSA) on behalf of Trunkline LNG Company, LLC (Trunkline) to request an interpretation of PHMSA's safety regulations on liquefied natural gas (LNG) facilities in 49 CFR Part193 for the design, manufacture, installation, and sizing of relief valves that protect remotely heated vaporizers at Trunkline's new LNG vaporization facility in Lake Charles, Louisiana. Current pipeline safety regulations require the operator of each LNG vaporization facility to comply with NFPA Standard 59A (2001 edition), which is incorporated by reference in §193.2013.

PHMSA is pleased to provide Trunkline with this clarification regarding your inquiry. We interpret §193.2401 to require that vaporizer safety relief valves comply with all provisions in the NFPA 59A standard including but not limited to Chapters 1, 5, 12, Section 5.2.1, and Section 5.4.1(a). Accordingly, Trunkline must design, size, install, operate, and maintain vaporizer safety relief valves with a maximum pressure accumulation that is consistent with the NFPA standard 59A, the ASME Boiler and Pressure Vessel Code (1992 edition), Section VIII, Division 1 (which is incorporated by reference in NFPA 59A), as well as 49 CFR Part 193. Where a conflict exists between NFPA and ASME with respect to vaporizer safety relief valves, the incorporated NFPA standard prevails.

I hope that this information is helpful to you. If I can be of further assistance, please contact me at (202) 366-3015.

Sincerely,

John A. Gale
Director, Office of Regulations

TAsebe:jmd:64046:05/27/08
cc:PHP-30:PHP-100-500:TQ:Webpage:Official File
T:PHP-30:Interps:Trunkline

Trunkline LNG
A Southern Union Company

5444 Westheimer Road
Houston, TX 77056-5306

P.O. Box 4967
Houston, TX 77210-4967

713.989.7000

February 17, 2009

Mr. Jeffrey Wiese
Associate Administrator
Office of Pipeline Safety (PHP-30)
PHMSA
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Dear Mr. Wiese:

Re: Request for Interpretation

Pursuant to the availability of guidance and interpretive assistance described in 49 CFR 190.11(b), Trunkline LNG (TLNG) requests the concurrence of the Pipeline and Hazardous Materials Administration (PHMSA) that TLNG's interpretation of a particular code requirement regarding relief valve capacity is correct.

TLNG is in the final stages of construction leading toward commissioning of new facilities that add to the capacity and efficiency of its LNG terminal near Lake Charles, Louisiana. It is required by 49 CFR 193.2101 that these new facilities must comply with the requirements of Part 193 and of NFPA 59A. During an inspection of the construction project by the FERC, the staff questioned the apparent capacity of the vaporizer relief valves. As a result of subsequent discussions and the submittal of a detailed engineering analysis regarding the relief valve sizing, FERC requested that TLNG seek concurrence from PHMSA on its regulatory and engineering basis for the relief valve sizing. Two particular sections of NFPA 59A are relevant and are reproduced below.

> 1.2 Nothing in this standard is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this standard.
>
> 5.4.1 Each vaporizer shall be provided with a safety relief valve(s) sized in accordance with either of the following requirements.
>
> (a) The relief valve capacity of heated or process vaporizers shall be such that the relief valve(s) discharges 110 percent of rated vaporizer natural gas flow capacity without allowing the pressure to rise more than 10 percent above the vaporizer maximum allowable working pressure.
>
> (b) The relief valve capacity for ambient vaporizers shall be such that the relief valve(s) discharges at least 150 percent of rated vaporizer natural gas flow capacity (as specified for standard operating conditions) without allowing the pressure to rise more than 10 percent above the vaporizer maximum allowable working pressure.

The safety system analysis and design for the LNG vaporization process incorporates provisions and safety features that minimize the relief valve capacity requirements in the event of an upset condition. This total system approach produces an equivalent level of protection as would be provided by strict incorporation of the requirements of NFPA 59A § 5.4.1. The applicable calculations were conducted in accordance with API 521 - Guide for Pressure-Relieving and Depressuring Systems. The materials designed and installed for this overpressure protection service are of equivalent quality, strength, fire resistance, effectiveness and durability as would have been provided by larger relief valves and vent systems. The system design provides optimal service by minimizing the relief valve capacity requirement thus minimizing the amount of fugitive emissions in the event of activation. This design also minimizes the sizing of the vent system and conserves resources so required.

The vaporizers use a potassium formate heat transfer fluid to vaporize the LNG. This fluid is then rewarmed by passing through ambient air heat exchangers. While the maximum rated flow rate through the vaporizers is on the order of 1,000,000 lb/hr, studies and analysis of conditions under which pressure relief could conceivably be required showed the maximum relieving capacity requirement to be 100,000 lb/hr. This is a "blocked in" case. A thorough review and consideration of other scenarios led to this conclusion. Those studies, calculations and results are detailed in the attached document, which has also been provided to your technical staff.

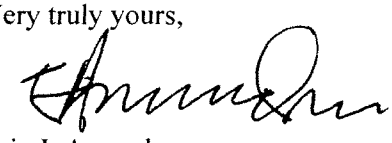
Standard analytical methods were used. TLNG concluded that sizing the relief valves for the maximum relief requirement rather than based on a flow rate is an acceptable method and results in an equivalent level of safety, and is therefore consistent with the provisions of NFPA 59A §1.2, cited above.

TLNG respectfully requests PHMSA consideration and concurrence in that interpretation. In addition to providing the technical information to your staff, it has also been provided to the FERC. We are available to answer any additional questions you may have on this matter or to meet with you or your representatives. TLNG also requests that this review and interpretation be expedited to the extent possible, as these facilities need to be commissioned within approximately the next three months. The FERC staff has indicated they are relying on PHMSA's resolution of this matter before they issue the operating permit.

You may contact me at any time at the above address, by telephone at 713.989.7460 or by email at Eric.Amundsen@sug.com.

Thank you for your consideration.

Very truly yours,



Eric J. Amundsen
Vice President, Technical Services

Encl.

Cc: R. Seeley – PHMSA
J. Jacobi – PHMSA
A. Mayberry - PHMSA

Trunkline LNG

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CONTAINS "CEII"
(DO NOT RELEASE)

December 22, 2008

Via e-Filing

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Infrastructure Enhancement Project (IEP)
Docket No. CP06-102-000
FERC Data Request OEP/DG2E/LNGC

Dear Ms. Bose:

Enclosed herewith for filing with the Federal Energy Regulatory Commission ("Commission") is Trunkline LNG Company, LLC's ("Trunkline LNG") response to the Commission's December 1, 2008 request related to the IEP Construction Inspection in the subject proceeding. Pursuant to the Commission's Filing Guide dated June 24, 2008, Trunkline LNG submits herewith this transmittal letter and data response identified as "**PUBLIC**" information. In addition, under separate cover is this transmittal letter and data response with Attachments identified as "**CRITICAL ENERGY INFRASTRUCTURE INFORMATION" ("CEII").**

Trunkline LNG respectfully requests that only the information submitted as "**Public**" be placed on the internet

Any questions regarding this submittal should be directed to the undersigned.

Respectfully submitted,

TRUNKLINE LNG COMPANY, LLC

/s/ Stephen T. Veatch
By_____
Stephen T. Veatch
Sr. Director, Certificates and Tariffs

Enclosures
cc w/Enc: Mr. Andrew Kohout (FERC)
cc w/o Enc: Mr. Chris Zerby (FERC)