

**1. If the facility has already been constructed, what versions of the NFPA standards were utilized?**

The NFPA standards employed were the latest versions at the time of construction in 2007, including but not limited to:

- 10 (2002), Version), Standard for Portable Fire Extinguishers
- 13 (2002), Installation of Sprinkler Systems,
- 14 (2003), Installation of Standpipe and Hose Systems.
- 15 (2001), Standard for Water Spray Fixed Systems for Fire Protection
- 24 (2002), Standard for the Installation of Private Fire Service Mains and Their Appurtenances 30 (2003), Flammable and Combustible Liquids Code 70 (2005), National Electric Code<sup>2</sup>
- 72 (2002), National Fire Alarm and Signaling Code
- 101 (2006), Life Safety Code®
- 780 (2004), Standard for the Installation of Lightning Protection Systems 850 (2005), Fire Protection for Electric Generating Plants
- 2001 (2004), Standard on Clean Agent Fire Extinguishing Systems

**2. If the facility has yet to be constructed, what versions of the NFPA standards will be utilized?**

Not applicable.

**3. How would recommendation #6, "Recommendation as to adoption of codes" in the Thomas Commission Executive Report affect the facility?**

The recommendation would require minimal changes to our Environmental Health and Safety and maintenance practices at the facility. Should CMEEC need to modify the gas line piping configuration for any reason, for example if another unit was added requiring gas piping, the latest code additions would be used. We note that CMEEC's contractor did not use natural gas to blow the piping during initial construction, nor would it use natural gas in conjunction with any future piping repairs, additions or modifications.

**4. How would the following codes affect construction or modification of the facility:**

- a. NFPA 37 (2010 edition);
- b. NFPA 54 (2009 edition);
- c. NFPA 54 Temporary Interim Amendment 09-3 (August 25,2010);
- d. NFPA 850 (2010 edition);
- e. NFP A 853 (2010 edition);
- f. ASME B31; and
- g. ASME B31.1 Appendices N and V.

The Pierce Generating Station was built and commissioned in 2007 and complied with all of the up-to-date codes listed above at the time of the construction. Upon reviewing the more recent additions cited above and discussions with the construction contractor, the practices in place during construction of Pierce Generating Station in 2007 would not have changed had the above code revisions been in place

at the time. CMEEC notes that the portion of the gas piping constructed and operated by CMEEC was purged using nitrogen.

**5. What is useful lifespan of the natural gas piping/pipelines located within and to the facility?**

The pipeline could last upwards of 100 years if properly maintained.

**6. Would the natural gas piping/pipelines within and to the facility need to be replaced during the life of the facility?**

No. The lifespan of the of the gas piping inside and to the Pierce Generating Station is expected to be greater than the lifespan of the plant itself under normal operating conditions.

**7. Do you foresee any circumstances that would require replacement of a section of natural gas piping/pipeline within and to the facility?**

Under normal operating conditions, replacement of any of the gas lines should not be necessary. Any event damaging the plant would require gas pipe inspection and possible replacement. The design basis for the piping is robust and only an extreme event would be likely to force replacement. The pipe is protected from corrosion and accidental breakage and is checked and monitored in the course of plant operations. As previously mentioned in response to Question 6, the life span of the piping is greater than that of the plant which the piping serves under normal operating conditions.

**8. If so, would a new section of natural gas piping/pipeline within and to the facility be installed and require cleaning?**

If the structural integrity of the piping/pipeline were impacted by an extreme event, new piping would be installed and would require cleaning.

**9. What type of material is the natural gas piping/pipeline within and to the facility composed of?**

The natural gas piping/pipeline within and to the Pierce Generating Station from the natural gas meter station is owned and operated by CMEEC and is composed of stainless steel. The pipeline immediately downstream from the interstate pipeline to the meter station is made of carbon steel and is owned and operated by Spectra.

**10. How many linear feet of natural gas piping/pipeline are located within and to the facility?**

Beginning at the point after the interstate Spectra Gas House revenue meters (the point at which CMEEC ownership and control begins) to the Pierce Generating Station there are 223 lineal feet of piping consisting of:

- 93 lineal feet of piping from the gas module inside the plant to the outside wall (stainless steel);  
and

- 25 lineal feet of valved-off piping affixed to the southeast section of the building (stainless steel); and
- 105 lineal feet of underground piping from the outside wall isolation valve to the Spectra Gas House (carbon steel).

**11. What is operating pressure (psig) of the natural gas piping/pipeline within and to the facility?**

Natural gas from the interstate pipeline comes to the Spectra Gas House at between 300-700 psig. CMEEC takes custody of the gas after it is regulated to the required delivery pressure and has passed through Spectra's revenue meters. Gas is regulated down to about 375 psig. If the gas line pressure is below 375 psig, there is no means at this site to compress the gas to the plant required minimum operating pressure (375 psig) and, consequently, the plant would then switch to operating on oil.

**12. What is the nominal pipe size in inches within and to the facility?**

The nominal pipe size is 6 inches within and to the facility.

**13. What is the length in feet of piping/pipeline that requires/required purging within and to the facility?**

223 lineal feet of piping/pipeline required purging.