

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

IN RE:	:	
	:	
REOPENING OF FINAL DECISIONS	:	DOCKET NO. NT-2010
PURSUANT TO C.G.S. § 4-181A(B) FOR	:	
JURISDICTIONAL NATURAL GAS-FIRED	:	
ELECTRIC GENERATING FACILITIES UNDER	:	
C.G.S. § 16-50i(a)(3) AND C.G.S. § 16-50k(a)	:	
LIMITED TO COUNCIL CONSIDERATION OF	:	
CHANGED CONDITIONS AND THE	:	
ATTACHMENT OF CONDITIONS TO THE	:	
CERTIFICATES AND DECLARATORY	:	
RULINGS CONSISTENT WITH THE FINDINGS	:	
AND RECOMMENDATIONS IN THE FINAL	:	
REPORT ISSUED BY THE KLEEN ENERGY	:	
PLANT INVESTIGATION REVIEW PANEL	:	
(NEVAS COMMISSION) AND THE FINDINGS	:	
AND RECOMMENDATIONS IN THE	:	
EXECUTIVE REPORT ISSUED BY THE	:	
THOMAS COMMISSION	:	NOVEMBER 15, 2010

**RESPONSES OF PRATT & WHITNEY TO  
CONNECTICUT SITING COUNCIL PRE-HEARING INTERROGATORIES**

On October 28, 2010, the Connecticut Siting Council (“Council”) issued Pre-Hearing Interrogatories to Pratt & Whitney (“P&W”) in connection with the above-captioned proceeding.

Below are P&W’s responses.

Question No. 1

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

Response

Design of the P&W Co-Generation facility (the “Facility”) commenced in 1988. Construction of the Facility was completed and the Facility became operational in 1992.

Currently available documentation indicates that the gas compressor and receiver were manufactured to the 1986 ASME Boiler and Pressure Vessel Code (B31) standard. The reverse flow filter separator was designed to the 1989 ASME Boiler and Pressure Vessel Code standard.

Question No. 2

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

Response

Not applicable.

Question No. 3

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

Response

Item #6, "Recommendation as to the adoption of codes" in the Thomas Commission Executive Report" primarily addresses new construction, and thus would have little or no impact on the Facility.

Question No. 4

How would the following codes affect construction or modification of the facility?

- a. NFPA 37 (2010 edition); Installation and Use of Stationary Engines
- b. NFPA 54 (2009 edition); Gas Equipment and Piping
- c. NFPA 54 Temporary Interim Amendment 09-3 (August 25, 2010); Purging
- d. NFPA 850 (2010 edition); Fire Protection of High Voltage Equipment and Plants
- e. NFPA 853 (2010 edition); Fuel Cells
- f. ASME B31; and
- g. ASME B31.1 Appendices IV and V.

Response

The provisions in NFPA 853 relate specifically to Fuel Cells and do not apply to the Facility. The remaining code provisions listed above will have no affect on Facility operations. Some or all of these code provisions may affect the Facility if modifications are made to the gas piping systems. P&W has no current plans to modify the piping systems at the Facility.

Question No. 5

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

Response

The expected useful life span of the natural gas piping serving the Facility would range from 25 to 50 years.

Question No. 6

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

Response

P&W expects the Facility will continue to operate for a time period greater than 50 years. It is anticipated, therefore, that all or portions of the piping would need to be replaced at some point in the future. The new piping would be installed in accordance with all applicable codes and standards in place at that time.

Question No. 7

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

Response

The majority of the gas piping is located outdoors except for one 50-foot section of eight (8) inch, 30 psig supply main that runs through the Facility powerhouse. Physical damage would be the only foreseeable circumstance that might require replacement of the gas piping. There are no current plans to modify any of the gas piping serving the Facility.

Question No. 8

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

Response

Yes. Any new section of piping that may be installed would require cleaning.

Question No. 9

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

Response

The piping material is carbon steel.

Question No. 10

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

Response

There are approximately 520 linear feet of gas piping extending from the Connecticut Natural Gas ("CNG") meter to the Facility turbine.

Question No. 11

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

Response

Natural gas is supplied from the CNG meter to the gas compressor at a nominal 30 psig. The gas is compressed and cooled and sent to the Facility at 450 psig.

Question No. 12

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

Response

The gas piping ranges in size from twelve (12) inch diameter to four (4) inch diameter. From the CNG meter, the piping is twelve (12) inches in diameter. The piping reduces from twelve (12) to eight (8) inches in diameter after the isolation valves at the CNG meter and continues to Facility's gas compressor and from eight (8) to four (4) inches in diameter at the compressor outlet. The piping that is routed to the gas turbine is four (4) inches in diameter.

Question No. 13

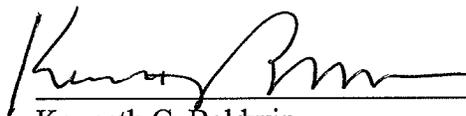
What is the length in feet of piping/pipeline that requires/required purging within and to the facility?

Response

Currently, no portion of the piping requires purging. The gas piping passes through many components on its route from the CNG meter to the gas turbine. There are sections of piping that can be isolated. The maximum length of piping that could require purging within the Facility is approximately 520 feet.

**CERTIFICATE OF SERVICE**

I hereby certify that on this 15<sup>th</sup> day of November 2010, a copy of the foregoing was sent via electronic mail to all participants of record.

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin", written over a horizontal line.

Kenneth C. Baldwin