

# NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY  
THE HARTFORD ELECTRIC LIGHT COMPANY  
WESTERN MASSACHUSETTS ELECTRIC COMPANY  
THE NUCLEAR WATERS POWER COMPANY  
NORTHEAST UTILITIES LEASING SERVICE COMPANY  
NORTHEAST UTILITIES REAL ESTATE COMPANY

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September 5, 1979

Docket No. 50-336

Director of Nuclear Reactor Regulation  
Attn: Mr. R. Reid, Chief  
Operating Reactors Branch #4  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Reference: (1) B. H. Grier letter to W. G. Council dated February 8, 1979  
forwarding I&E Bulletin #79-01.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 2  
I&E Bulletin #79-01 Environmental Qualification  
of Class 1E Equipment

In accordance with the reporting requirements of Reference (1), Northeast Nuclear Energy Company (NNECO) is informing the NRC Staff that it has determined that the Resistance Temperature Detectors (RTD) utilized in monitoring containment temperatures have not been qualified for service in the LOCA environment.

NNECO was informed September 4, 1979 by Rosemount, Incorporated, the RTD manufacturer, that the connection head in the RTD assembly has not been qualified to remain functional in a post-LOCA environment.

This equipment was stated to be qualified for post-LOCA operation in Section 7.5.1.2.1.2 of the Millstone Unit No. 2 FSAR. Specifically, it was stated that:

"The RTD and cables are specified for continuous operation in the containment including the environmental conditions after a loss-of-coolant or steam line break incident."

A review of the evolution of the design function for the subject RTD's reveals that the original design intent was Integrated Leak Rate Test monitoring. The RTD design function was upgraded during the latter stages of the plant licensing process to accommodate post-accident monitoring concerns. This substantiates NNECO's conclusion that this occurrence is not indicative of a generic deficiency in the electrical equipment qualification of Millstone Unit No. 2.

NNECO's review of the unavailability of these detectors post-LOCA has determined that no significant adverse effects would result.

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The Technical Specification operability requirement for these RTD's is identified in Specifications 3.6.1.5 and 4.6.1.5. These Specifications require that containment ambient temperature not exceed 120°F. The fact that the containment temperature monitoring RTD's are not LOCA qualified does not preclude them from satisfactorily performing this function.

Table 7.5 -2 of the FSAR indicates that the subject RTD's are utilized to assist in:

- (1) Determination of the magnitude of a pipe break;
- (2) Determination of the location of the pipe break; and
- (3) Assuring that the containment air coolers are operational.

Functions 1 through 3 above would be of informational interest to the plant operators, but are not essential. Qualified pressure detection instrumentation is available to assist the operator in accomplishing the above objectives. Current plant procedures do not rely on information provided by these instruments.

In response to Item 4 of Reference (1), continued plant operation is justified by the following considerations:

- (1) Current plant emergency procedures do not rely on the information provided by these instruments to diagnose and respond to off-normal or accident conditions.
- (2) The containment is equipped with eight (8) redundant detectors and it is unlikely that all will fail post-LOCA.
- (3) Temperature detectors are also located outside containment on the containment air recirculation units cooling water lines; these can be utilized to determine containment temperatures. Other alternate means of determining or inferring post-LOCA ambient containment temperatures are available such as the safety-related containment pressure sensors.
- (4) While qualification cannot be guaranteed at this time, the vendor supplying the gasket seal in the connection head has indicated the component will function in temperatures up to 300°F and 100% humidity.
- (5) No credit is taken for these RTD's in any current transient/accident analyses.

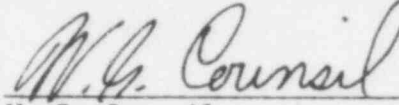
Nonetheless, in recognition of the Three Mile Island issues, NNECO recognizes it may ultimately be appropriate to upgrade post-incident monitoring capability at Millstone. At that time, the current qualification status of the subject RTD's will be duly considered during the upgrading process.

Additional information will be provided in the 14-day report as required in Reference (1).

We trust the above information is responsive to your requests of Reference (1).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in cursive script, reading "W. G. Counsil", written over a horizontal line.

W. G. Counsil  
Vice President