

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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August 7, 1980

Docket No. 50-245
A01126

Mr. Boyce H. Grier, Director
Region 1
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Reference: (1) B. H. Grier letter to W. G. Council dated July 18, 1980.

Gentlemen:

Millstone Nuclear Power Station, Unit No. 1
Response to I&E Bulletin No. 80-17, Supplement 1

In Reference (1), the NRC Staff required that we take certain specific actions regarding the Scram Discharge Volume (SDV) and the Standby Liquid Control System (SLCS). In response to this request, Northeast Nuclear Energy Company (NNECO) provides the information below for Millstone Unit No. 1.

As also requested in Reference (1), and to assist the NRC in evaluating the value/impact of this Bulletin Supplement, we have determined that the manpower expended in conduct of the review and preparation of the report required by the Supplement is 17 professional man-days for Millstone Unit No. 1. The manpower associated with corrective actions necessary, as identified by the Supplement, is an additional three man-days.

Item A1

Provide to the NRC Regional Office an analysis of the adequacy of the "as-built" SDV system and associated vent and drain systems, including any identified design deficiencies. Include copies of verified "as-built" isometric drawings of the SDV and detailed descriptions of the remainder of the system, verified to be correct, as part of this analysis.

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Response

NNECO has reviewed the SDV system and associated vents and drains to determine the ability of the SDV to properly drain following a scram and remain free of water. This review has revealed the following:

- (1) The SDV has a pitch of 1/8" per running foot of header. This pitch is adequate to ensure complete drainage of the header when the vent and drain valves are open.
- (2) The drain lines from the SDV to the instrument volume have a constant downward slope to assure complete drainage of the SDV's when the vent and drain valves are open. The drain line from the instrument volume to the drain tank ranges from horizontal to sloping downward. All drain piping is below the bottom of the instrument volume and will allow for free drainage of the instrument tank.
- (3) The drain tank cannot backup into the instrument volume because the tank is vented and has an overflow. Even if the vent and overflow lines were blocked, any water which should backup would backup out of floor drains at lower elevations before reaching the instrument tank.
- (4) The north vent line is sloped so that any water in it will flow to either the open end or back into the SDV and subsequently into the drain tank. This vent line was previously tied into the drain line downstream of the drain valve. This line was modified so that it is open to atmosphere over a floor drain to assure positive venting.
- (5) The south vent line is vented to atmosphere over a floor drain and is sloped in a similar manner to the north vent except a horizontal run exists between the vent valve and the opening to atmosphere. A large buildup of water in this section would not occur since if a large pool of water would form, it would run over the elbow into the drains. NNECO is evaluating sloping this line.

The ability of the SDV and associated vents and drains to perform their required function has been proven by ten years of performance and by recent testing, required by I&E Bulletin No. 80-17. This information was reviewed by us with NRC Staff personnel in your Region 1 office as requested on August 4, 1980. Two copies of "as-built" SDV isometric drawings were left with your Staff at that meeting. NNECO agreed to further clarify and resubmit the drawings to I&E by August 13, 1980.

Item A2

Revise and implement Operating Procedures as necessary to provide clear guidance to the licensed operator in the control room regarding when he should initiate the SLCS without obtaining prior supervisory approval. Provide a description of the implemented procedural requirements.

Response

Emergency procedures that stipulate SLCS initiation can be implemented by any licensed operator. The procedures clearly indicate when the SLCS will be initiated. The basic sequence of such procedures is that the operator will first verify scram has occurred. Should there be evidence of incomplete scram, further specific actions are stipulated to effect a scram. Should these further actions prove insufficient to bring the reactor within given parameters, the SLCS will be initiated.

Item A3

Assure that procedures exist and are implemented for specifying remedial action to be taken if water is found in the SDV system at times when it should be free of water. Provide a description of the implemented procedural requirements.

Response

Procedures specify remedial action if water is found in the SDV when it should be free of water. If more than 39 gallons of water is found in the instrument volume, a scram will be initiated. If the SDV headers are found to contain more than one inch of water, through daily, logged, U.T. surveillance, the plant will be shutdown within eight hours; unless, the cause is sooner found and corrected.

Item A4

Revise and implement administrative procedures as necessary to ensure that the SLCS key shall be readily available to the licensed operator in the control room. Provide a description of the implemented procedural requirements.

Response

The SLCS key is required to remain in the SLCS control switch and thus, readily available as discussed in Item A2.

Item A5

Continue daily monitoring of water levels in all scram discharge volumes until continuous monitoring system(s) (discussed in B.1 below) is (are) installed and operational (this requirement supersedes the requirements of Item 5 of I&E Bulletin No. 80-17 which required daily surveillance for only six (6) days).

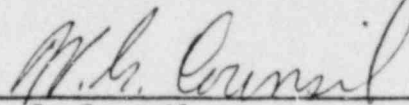
Response

We will continue to daily monitor for water in the SDV's using U.T. until a permanent continuous monitoring system is installed and operational.

Should you have any questions, please contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in cursive script, appearing to read "W. G. Council", is written over a horizontal line.

W. G. Council

Senior Vice President