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## MORTHEAST STUFFIES



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October 20, 1980

	Docket No. 50-336		1.53	
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Mr. Boyce H. Grier, Director Region 1		No. No.	1	
Office of Inspection and Enforcement U. S. Nuclear Regulatory Commission		VICE	C.	-
631 Park Avenue		S	5	

References: (1) B. H. Grier letter to W. G. Counsil dated July 31, 1980, transmitting ISE Bulletin No. 80-19.

(2) B. H. Grier letter to W. G. Counsil dated August 15, 1980. transmitting I&E Bulletin No. 80-19, Revision 1.

Gentlamen:

Millstone Nuclear Power Station, Unit No. 2 I&E Bulletin No. 80-19

In Reference (1), as supplemented by keference (2), the NRC Staff requested Northeast Nuclear Energy Company (NNECO) to determine whether C.P. Clare Model HG2X-1011 mercury-wetted relays are used in the logic matrix of the Reactor Protective System (RPS) at Millstone Unit No. 2. In addition, the Staff has requested that licensees of operating facilities utilizing these relays in the RPS logic matrix increase the frequency of surveillance tests on these relays and submit their plans and schedule for replacement of these relays or justification for continued use of the mercury-wetted relays in the RPS system.

In response to the Staff's request, NNECO provides the following information.

Millstone Unit No. 2 is a Combustion Engineering (CE) design NSSS and utilizes mercury-wetted relays in the RPS logic matrix.

No failures of these relays have occurred in approximately five years of plant commercial operation.

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On June 23, 1980, CE informed NNECO that the mercury-wetted relays in the RPS were failing at a greater than expected rate. CE also stated at that time that no replacement was available; however, efforts were on-going to qualify a suitable replacement relay. It is anticipated that qualified replacement relays will be available by November, 1980.

NNECO intends to purchase qualified replacement relays when they are available and will install them during the first outage of sufficient duration following receipt of the replacement relays.

NNECO has determined that the Reference (1) requirement to increase matrix relay surveillance frequency is not justified and takes exception based on the following:

 As previously mentioned, no relay failures have occurred at Millstone Unit No. 2 in over five years of operation.

. . . .

(2) The matrix relay surveillance test results in operating the reactor trip switchgear breakers. Each set of breakers must be opened and closed six times during the conduct of each test.

The 200% increase in test frequency will increase breaker wear thereby decreasing their reliability. Circuit breaker wear is an identified concern which required NNECO to completely rebuild the breakers during the current refueling outage.

(3) The matrix relay test is considered to be a "high risk" test. During this test, the probability of a plant trip due to operator/technician error or equipment failure is significantly increased.

The proposed increase in frequency of this undesirable surveillance testing is not justified based on the operating experience at Millstone Unit No. 2 and as noted above, is not in the interest of plant safety or reliability.

Based on the discussions above, NNECO requests relief from the requirements of Item 2 of Reference (1), testing RPS matrix relays every ten (10) days.

Should a relay failure occur in the RPS logic matrix before the mercury-wetted relays are replaced, the failure will be reported to the Staff, and a ten (10) day surveillance test frequency for the RPS logic matrix relays will be initiated.

In addition to the information provided above, the Staff requested that NNECO provide an estimate of the manpower expended in the review required by I&E Bulletin No. 80-19, the preparation of associated reports, and corrective actions necessary following the identification of problems through the Bulletin.

NNECC estimates that the manpower expended to date in the review and preparation of the response required by I&E Bulletin No. 30-19 has been approximately eight (8) man-hours.

The increased surveillance frequency proposed by the Bulletin would require an additional manpower expenditure of eight (8) man-hours per month. The increased manpower expenditure which would be required to respond to plant trips as a result of the increased surveillance frequency proposed in the Bulletin cannot be estimated although it is formidable.

In addition, NNECO estimates that one (1) man-week would be required to replace the RPS logic matrix relays.

We trust you find this information satisfies the intent of References (1) and (2). NNECO respectfully requests a written response concurring in the above outlined approach.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil Senior Vice President

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