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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 18, 1980

Docket No. 50-245

Mr. W. G. Counsil, Vice President
Nuclear Engineering and Operations
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06101

Dear Mr. Counsil:

We are continuing our review of your August 1, 1977 submittal concerning degraded grid voltage for Millstone Unit 1, which responded to our letter dated June 2, 1977. We have concluded that the following information is required to continue our review.

1. A second level of undervoltage protection has been installed on the non Class 1E 345 KV system. The function of these undervoltage relays is to protect the emergency equipment on the Class 1E buses. IEEE Standard 279-1971 requires protective channels to be Class 1E. Describe how Millstone Unit 1 can meet IEEE Standard 279-1971.

2. Staff position requires that the load shedding feature be automatically reinstated if the onsite source supply breakers are tripped. Describe how Millstone Unit 1 can meet this requirement. Manual load shedding is not acceptable.

3. Staff position 1-C-2, states that the time delay shall prevent spurious trips from the offsite (preferred) power. Show how a one second time delay on degraded voltage will be long enough to prevent a trip upon startup of a large emergency pump.

4. Staff position 1-d requires that "...the voltage monitors shall automatically initiate the disconnection of offsite power whenever..." a degraded voltage exists for the established time delay. What equipment is powered from the Class 1E bus and is in service during normal operations? Describe how Millstone 1 can meet this requirement.

5. Staff positions 1-3 require certain Technical Specifications. These Technical Specifications should include values for the trip setpoints of voltage and time delay, provide the required coincidence logic, provide action statements when the number of operable channels for degraded voltage protection is reduced, provide the surveillance requirements for channel calibration and functional tests, and provide the requirements to demonstrate the sequence of Class 1E bus de-energization, load shedding, voltage restoration, and load sequencing after a degraded voltage signal. You are requested to submit the proposed Technical Specification changes to cover these required items.

These questions were telecopied to you on March 26, 1980 so that your response could be submitted by April 26, 1980.

Sincerely,

for Thomas V. Wambach

Dennis L. Ziemann, Chief
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cc: See next page

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