

NORTHEAST UTILITIES



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

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October 19, 1984

Docket No. 50-423
B11349

Director of Nuclear Reactor Regulation
Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: (1) B. J. Youngblood to W. G. Council, Briefing of Glen Reed (ACRS) on Millstone Unit No. 3, dated September 26, 1984.

Dear Mr. Youngblood:

Millstone Nuclear Power Station, Unit No. 3
Turbine Overspeed Tests and PORVs

Enclosed are Northeast Nuclear Energy Company's (NNECO) responses to the questions raised by Mr. Glen Reed of the ACRS (Reference 1) regarding Millstone Unit No. 3 turbine generator overspeed tests and PORVs. These responses may assist you during the discussion with Mr. Glen Reed of the ACRS.

If there are any questions, please contact our licensing representative directly.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY
et. al.

BY NORTHEAST NUCLEAR ENERGY COMPANY
Their Agent

W. G. Council

W. G. Council
Senior Vice President

C. F. Sears

By: C. F. Sears
Vice President

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Then personally appeared before me C. F. Sears, who being duly sworn, did state that he is Vice President of Northeast Nuclear Energy Company, an Applicant herein, that he is authorized to execute and file the foregoing information in the name and on behalf of the Applicants herein and that the statements contained in said information are true and correct to the best of his knowledge and belief.

James T. Powers
Notary Public

My Commission Expires March 31, 1989



Attachment I

Question 1:

Will the turbine overspeed tests assure that upon loss of governor control and reliance only on the overspeed safety controls (mechanical overspeed trip and perhaps an electrical), that the TG will not roll up beyond design safe speeds?

Response:

The Electro Hydraulic Control (EHC) provides a normal overspeed protection system and an emergency overspeed protection system to limit turbine overspeed. These two systems are essentially separate and independent. The normal overspeed protection system is part of the turbine load and speed control system and is designed to limit turbine overspeed without a turbine trip under all load conditions. The emergency overspeed protection system is part of the emergency trip system and is designed to trip the turbine if the turbine speed exceeds 110 percent of rated speed. All components of the overspeed protection systems can be tested while the turbine is carrying load.

During Millstone Unit No. 3 startup testing, NNECO will perform a complete overspeed protection test to verify that the turbine generator will not go beyond the design safe speed in accordance with manufacturer's specifications. Subsequently, this test will be performed during each refueling outage. In addition, tripping logics will be demonstrated operable on a monthly basis. All inlet valves to the turbine that supply steam will be functionally tested to verify proper operation on a monthly basis.

Question 2:

Did the PORV that have been obtained from the Millstone Nuclear Power Station Unit No. 3 and installed at the Haddam Neck Plant, get reviewed (either by the NRC Staff or the Licensee) with respect to their compatibility and reliability on a borated water system?

and

Question 3:

To what extent can a specific utility make in-house modifications such as the transfer of the PORVs from Millstone Unit No. 3 to Haddam Neck? To what extent are these changes approved by the utility's engineering staff at the plant site rather than the engineering staff in the headquarters design group? Under what conditions do such modification activities get reported to the NRC Staff? What is the role of the NRC Staff in reviewing procedures (in-house) for verifying that in-house modifications have received appropriate scrutiny and approval?

Response:

With regard to Question 2 and 3, please find attached a copy of a letter previously sent to a staff consultant of the ACRS on this subject. This document was prepared at the verbal request of Mr. John MacEvoy, and focused on the issues verbally raised by him. Many of the elements of Questions 2 and 3 are

answered in the attached document. With regard to other questions on the design change process, we note that we have had several conversations with ACRS representatives regarding a potential visit by them to our corporate offices. Given that the ACRS apparently plans to arrange a visit to our offices on this subject, we offer no additional observations at this time.