

NORTHEAST UTILITIES



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

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September 23, 1982
Docket No. 50-245
B10547

Director of Nuclear Reactor Regulation
Attn: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

References: (1) D. M. Crutchfield letter to W. G. Council dated,
July 23, 1981.

Gentlemen:

Millstone Nuclear Power Station Unit No. 1
SEP Topic VIII-3.B, DC Power System Bus Voltage
Monitoring and Annunciation

Reference (1) forwarded the Staff's final evaluation of SEP Topic VIII 3.B, DC Power System Bus Voltage Monitoring and Annunciation, for Millstone Unit No. 1. Reference (1) identified the fact that Millstone Unit 1 does not meet current licensing criteria for DC system monitoring. As part of the Integrated Assessment for Millstone Unit 1, Northeast Nuclear Energy Company (NNECO) has evaluated the significance of the deviations from current criteria and come to the following conclusions.

Millstone Unit No. 1 has two main 125 VDC buses (DC-1, DC-1A) and two 24 VDC systems. The 125 VDC bus system (DC-1) has the following status indications:

1. Control Room Indications
 - a. Battery Charger Trouble Alarm
 - b. DC System Ground Alarm
 - c. DC Bus Voltage
 - d. Battery/Bus Undervoltage Alarm
 - e. Bus Parallel to DC-1A Alarm
 - f. Battery Breaker Open Alarm

2. Charger Monitoring Equipment
 - a. Trouble alarm monitoring lights for AC power supply failure (3 phases), High and Low DC output voltage and AC/DC internal failure
 - b. Output ammeter and voltmeter
 - c. Ground detection monitor light

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3. DC Switchboard
 - a. Battery/Bus Ammeter and Voltmeter
 - b. Bus Parallel Monitor Light
4. Bus Ground Indication Panel
 - a. Positive and Negative Ground Voltmeters
 - b. Positive and Negative Ground Monitor Lights

The other main 125 VDC system (DC-1A) has the same status indications except for 3.b bus parallel monitor light.

The 24 VDC neutron monitoring system has the following status indications:

1. Control Room Indications
 - a. Battery/Charger 1A Trouble Alarm
 - b. Battery/Charger 1B Trouble Alarm
2. Charger Monitoring Equipment
 - a. DC Ammeter and Voltmeter
 - b. AC/DC Power Monitor Lights

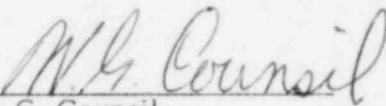
In addition, for the 125 VDC systems, all of the feeders to the DC buses (DC-11A-1, 2, and 3), the control room distribution panels, the 4 KV AC buses, the 480V emergency load center buses, and vital equipment are all individually alarmed for loss of DC power in the control room. Further alarming in the control room as well as local monitor lights are provided to indicate a transfer of power from the normal DC switchboard source for the DC distribution buses DC-11A-1, 2 and 3 to the emergency or alternate source.

It is NNECO's position that sufficient monitoring equipment is provided in the control room or locally to alert the operators of DC system trouble. Also, the IREP showed the existing DC system to be highly reliable and did not identify any areas where modifications were desirable to provide more information on DC system. Therefore, NNECO has concluded that no modifications are warranted to resolve this SEP topic.

We trust the Staff will find the above information sufficient to concur in NNECO's determination that the existing DC system monitoring equipment is adequate.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY



W. G. Council
Senior Vice President