

LICENSEE EVENT REPORT

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 C T M N S 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5

CON'T REPORT SOURCE L 0 5 0 0 0 3 3 6 7 0 8 2 5 8 2 8 1 1 0 9 8 4 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

02 With the plant at 100 per cent power level and during routine packing replacement of
03 the 'A' charging pump, a crack was discovered in the 'A' charging pump block. On
04 2/27/84, with the plant at 100 percent power, while investigating unidentified leakage
05 in the 'B' charging pump a crack was discovered inside the pump bores. On 4/4/84
06 again at 100 per cent power a crack was discovered in the replacement 'A' charging pump
07 block during a routine packing replacement. Two charging pumps were always available.
08 therefore no limiting conditions of operation were entered. Similar LER's: 79-14.

09 SYSTEM CODE P C 11 CAUSE CODE E 12 CAUSE SUBCODE C 13 COMPONENT CODE P U M P X X 14 COMP. SUBCODE E 15 VALVE SUBCODE Z 16
17 LER/RO REPORT NUMBER 8 2 0 3 6 0 3 X 3
ACTION TAKEN A 18 FUTURE ACTION Z 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 22 ATTACHMENT SUBMITTED Y 23 NPRD-4 FORM SUB Y 24 PRIME COMP. SUPPLIER L 25 COMPONENT MANUFACTURER G O 4 5 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

10 An independent destructive evaluation of the original 'A' and 'B' charging pumps dis-
11 covered a sub surface inclusion in the pump bore. The cracks started at these inclusions
12 due to high local stresses and propagated due to fatigue. The exact cause of the crack-
13 ing of the replacement 'A' charging pump is unknown. Inclusions similar to the ones that
14 cracked the original 'A' and 'B' pumps in August 1982 and February 1984 are suspected.

15 FACILITY STATUS E 28 % POWER 1 0 0 29 OTHER STATUS NA 30 METHOD OF DISCOVERY B 31 DISCOVERY DESCRIPTION Preventive Maintenance 32
16 ACTIVITY CONTENT Z 33 RELEASED OF RELEASE Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36
17 PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION NA 39
18 PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION NA 41
19 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43
20 PUBLICITY ISSUED N 44 DESCRIPTION NA 45

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ATTACHMENT TO LER 82-36/3X-3  
NORTHEAST NUCLEAR ENERGY COMPANY  
MILLSTONE NUCLEAR POWER STATION - UNIT 2  
PROVISIONAL LICENSE NO. DPR-65  
DOCKET NUMBER 50-336

The analysis of the original 'A' charging pump discovered an inclusion just below the surface of the pump bore. This defect (.025") was not detectable by the non-destructive methods used at the time of pump fabrication.

The 'B' charging pump was also destructively analyzed, and again the crack propagated from similarly sized sub-surface inclusions. In addition, an engineering calculation has been performed to verify suction pressures are above NPSHR for these pumps. A dye penetrant inspection is performed each time maintenance is performed on the pump block to detect any cracks as early as possible.

During all cases of charging pump cracking two pumps were always operable as required by the Units Technical Specifications. The first indication of a problem with any of the three pumps was increased unidentified leakage. At no time did this leak rate exceed the Tech. Spec. limit of 1 gpm. Based on this, adequate means exist to monitor pump failure/leakage. Therefore no safety concerns are left open by this item.

# NORTHEAST UTILITIES



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

General Offices • Selden Street, Berlin, Connecticut

P.O. BOX 270  
HARTFORD, CONNECTICUT 06141-0270  
(203) 666-6911

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U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Reference: Facility Operating License No. DPR-65  
Docket No. 50-336  
Reportable Occurrence RO 50-336/82-36/3X-3

Gentlemen:

This letter forwards the update Licensee Event Report 82-36/3X-3. This update report provides information on additional pump failures.

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

FOR: E. J. Mroczka  
Station Superintendent  
Millstone Nuclear Power Station

*W. D. Romberg*  
BY: W. D. Romberg  
Unit 1 Superintendent  
Millstone Nuclear Power Station

EJM/TPF:mo

Attachment: LER RO 50-336/82-36/3X-3

cc: Dr. T. E. Murley, Region 1  
Director, Office of Inspection and Enforcement Washington, D. C. (1)  
Director, Office of Management Information and Program Control,  
Washington, D. C. (1)

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