

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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May 23, 1984
MP-6032

U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Reference: Facility Operating License No. DPR-65
Docket No. 50-336
Reportable Occurrence RO 50-336/82-36/3X-2

Gentlemen:

This letter forwards the update Licensee Event Report 82-36/3X-2. This update report provides information on additional pump failures.

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

A handwritten signature in cursive script, appearing to read 'E. J. Mroczka'.

E. J. Mroczka
Station Superintendent
Millstone Nuclear Power Station

EJM/TPF:mo

Attachment: LER RO 50-336/82-36/3X-2

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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PDR ADOCK 05000336
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LICENSEE EVENT REPORT

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

1 C T M N S 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
 8 9 14 15 25 26 30 37 CAT 36

REPORT SOURCE L 0 5 0 0 0 3 3 6 7 0 8 2 5 8 2 E 0 5 2 3 8 4 9
 80 81 86 89 94 95 98 100

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

2 With the plant at 100 per cent power level and during routine packing replacement of
 3 the 'A' charging pump, a crack was discovered in the 'A' charging pump block. On
 4 2/27/84, with the plant at 100 per cent power, while investigating unidentified leakage
 5 in the 'B' charging pump a crack was discovered inside the pump bores. On April 4, 1984
 6 again at 100 per cent power a crack was discovered in the replacement 'A' charging pump
 7 block during a routine packing replacement. Two charging pumps were always available,
 8 therefore no limiting conditions of operation were entered. Similar LER's: 79-14

SYSTEM CODE P C 11 CAUSE CODE E 12 CAUSE SUBCODE C 13 COMPONENT CODE P U M P X X 14
 9 10 11 12 13 18 19 20
 17 LER NO REPORT NUMBER 8 2 0 3 6 0 3 X 2
 21 22 23 24 26 27 30 31 32
 ACTION TAKEN A 18 X 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 22
 33 34 35 36 37 40 41 42 43 44 47
 ATTACHMENT SUBMITTED Y 23 NPRD-4 FORM SUB Y 24 PRIME COMP SUPPLIER L 25 COMPONENT MANUFACTURER G 0 4 5 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 An independent destructive evaluation of the original 'A' charging pump discovered a
 11 sub surface inclusion in the pump bore. The crack started at this inclusion due to
 12 high local stresses and propagated due to fatigue. The exact cause of the cracking
 13 of the 'B' and replacement 'A' charging pumps is unknown at this time. Inclusions
 14 similar to the one that cracked the original 'A' pump in August 1982 are suspected.

FACILITY STATUS E 28 % POWER 1 0 0 29 OTHER STATUS NA 30 METHOD OF DISCOVERY B 31 DISCOVERY DESCRIPTION Preventive Maintenance 32
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 ACTIVITY CONTENT RELEASED OF RELEASE 2 33 Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 PERSONNEL EXPOSURES NUMBER 0 0 37 TYPE Z 38 DESCRIPTION NA 39
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 PERSONNEL INJURIES NUMBER 0 0 40 DESCRIPTION NA 41
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
 PUBLICITY ISSUED N 44 DESCRIPTION NA 45
 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

NAME OF PREPARER Thomas Filburn

PHONE (203) 447-1791

NRC USE ONLY

ATTACHMENT TO LER 82-36/3X-2
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 is going to be destructively analyzed to try and determine an exact cause of block failure. In addition, instantaneous suction pressure readings will be gathered to verify suction pressures are above pump NPSHR with various pump running combinations. 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.