NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Millstone Nuclear Power Station Unit 1	0 5 0 0 0 2 4 5	1 OF 0 2

TITLE (4)
Jet Pump Instrumentation Nozzle Assembly Weld Indications

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
1 1	2 2	8 5	8 5	0 2 8	0 0	1 2	1 9	8 5		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
R		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	X 50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
David J. Yapchanyk, Engineer X4428	AREA CODE 2 0 1 3 — 4 4 7 - 1 1 7 9 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	
X	A D	N Z L	G 0 8 0	Y							

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On November 22, 1985 at 1600 hours, as a result of performing inservice inspection during the 1985 refuel outage, possible intergranular stress corrosion cracking was identified in several welds on both jet pump instrumentation assemblies. The welds in question were repaired using the weld overlay technique and a pressure test of the jet pump assemblies was performed.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Millstone Nuclear Power Station Unit 1	0 5 0 0 0 2 4 5	8 5	— 0 2 8	— 0 0	0 2 OF 0 2

TEXT *(If more space is required, use additional NRC Form 366A's)* (17)

On November 22, 1985 at 1600 hours, as a result of performing Inservice Inspection (ISI) during the 1985 refuel outage, ultrasonic test indications that are believed to be Intergranular Stress Corrosion Cracking (IGSCC) were identified on both jet pump instrumentation assemblies. The attached sheet lists the welds, indications and the dispositions.

The indications on the jet pump instrument assemblies were repaired using the weld overlay repair technique in accordance with the ASME Code Section XI 1980 Edition. The weld filler metal used was type 308L on Stainless Steel (Type 304) basemetals and INCO 82 for dissimilar basemetal combinations. The filler metal was chosen for weld overlay immunity to IGSCC and superior weld metal toughness. The weld overlay surface was inspected using liquid penetrant to ensure weld integrity and ultrasonically inspected to ensure weld to base metal bonding and a defect free overlay volume. The impact of the additional mass has been evaluated to ANSI B31.1 to ensure that the applicable jet pump instrumentation assembly support integrity remains effective.

The jet pump instrumentation assemblies have been analyzed to ANSI B31.1 to ensure that shrinkage due to the weld overlay application does not degrade the primary pressure boundary and associated supports, nor the integrity of the jet pump instrumentation tubes and associated supports. A pressure test of the jet pump assemblies was also performed.

Similar events include LER's 85-022 and 84-008.

Millstone Nuclear Power Station
Unit 1

Welds Rejected by Examination

System	Weld	Flaws	Disposition
Jet Pump Instrument Nozzle "B"	JPBJ-2 12" eccentric reducer to 12" pipe	#1 .172" deep x 360° intermittent. Recorded by examiner as 25% deep of .688" nominal wall thickness.	Weld Overlay
	JPBJ-3 12" pipe to 12" seal	#1 .344" maximum depth x 360° intermittent. Recorded by examiner as 50% maximum depth of .688" nominal wall thickness.	Weld Overlay
Jet Pump Instrument Nozzle "A"	JPAF-2-SE 4" safe end to 4" x 8" eccentric reducer	#1 .042" deep x .5" long at 5.5"-6" clockwise. Note: Conservatively treated as a flaw. Examination was from Safe End side of weld only due to outside diameter geometric configuration.	Weld Overlay
	JPAJ-2 12" eccentric reducer to 12" pipe	#1 and #2 both flaws combined are .1" deep x 4.66" long at 39"- 3.22" clockwise thru the 0 reference point at top dead center of the JPI nozzle.	Weld Overlay
Jet Pump Instrument Nozzle "B"	JPBF-2-SE 4" safe end to 4" x 8" eccentric reducer	#1 .09" deep x .5" long at 2.75"-3.25" clockwise. Recorded by examiner at center point 3" clockwise 1/2" long. #2 .06" deep x .625" long at 13.68"-14.31" clockwise. Recorded by examiner at center point 14" clockwise 5/8" long. Note: Conservatively treated as two flaws. Examination was from Safe End side of weld only due to outside diameter geometric configuration.	Weld Overlay

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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MP-8518

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

Reference: Facility Operating License No. DPR-21
Docket No. 50-245
Licensee Event Report 85-028-00

Gentlemen:

This letter forwards the Licensee Event Report 85-028-00 required to be submitted within thirty (30) days pursuant to the requirements of 10CFR50.73.

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

Wayne D. Romberg
Station Superintendent
Millstone Nuclear Power Station

WDR/DJY:mo

Attachment: LER 85-028-00

cc: Dr. T. E. Murley, Region I

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