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)
North Anna Power Station, Unit 1	0 5 0 0 0 3 3 8	1 OF 0 2

TITLE (4)
Liquid Waste Discharge Without Demineralizer Treatment

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 9	2 5	8 4	8 4	— 0 1 3	— 0 1	0 1	2 4	8 5	North Anna Unit 2	0 5 0 0 0 3 3 9
										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)			
2	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 3	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	X 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)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	Special Report
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
E. Wayne Harrell	AREA CODE 7 0 3 8 9 4 - 5 1 5 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	

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)

ABSTRACT

From September 10 to September 25, 1984, liquid radwaste was discharged without treatment with projected doses to Unrestricted Areas being in excess of the limits specified in T.S. 3.11.1.3. The clarifier effluent was discharged without treatment because the clarifier demineralizer in service during the time did not contain any resin required for ion exchange. The empty clarifier demineralizer was placed in service on September 10, 1984 due to lack of adequate controls placed on demineralizer status. Upon discovery of the inoperable clarifier demineralizer, the redundant loaded clarifier demineralizer was placed in service.

Additional investigation of the liquid radwaste treatment system disclosed that the liquid waste mixed bed clarifier demineralizers were not in service from July 11, 1984 to September 10, 1984. During this time period, projected doses to Unrestricted Areas due to liquid waste effluent were in excess of the limits specified in T.S. 3.11.1.3. This occurred as a result of administrative error.

The applicable Health Physics and Operating Procedures will be reviewed and adequate administrative controls will be included to ensure that the clarifier demineralizers are placed in service when required by T.S. 3.11.1.3 and that their status is known prior to placing them in service.

This event is reportable as a Special Report pursuant to Unit 1 and Unit 2 Technical Specifications 3.11.1.3.a and 6.9.2.

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

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

On September 25, 1984, with Unit 1 in Mode 2 following a refueling outage and Unit 2 in Mode 6, the "B" liquid waste mixed bed clarifier demineralizer (EIIS Identifier DM) which had been in service since September 10, 1984, was found to contain no resin required for ion exchange. The "B" clarifier demineralizer was initially placed in service on September 10 because projected doses to Unrestricted Areas due to clarifier effluent were determined to be in excess of the limits specified in T.S. 3.11.1.3. Consequently, between September 10 and September 25, 1984, clarifier effluent was discharged without treatment with projected doses due to liquid effluent in excess of the specified limits. The discharge path of the clarifier effluent is into the Circulating Water (EIIS System Identifier NN) discharge canal and subsequently into the North Anna Reservoir (EIIS Identifier RVR).

The unloaded clarifier demineralizer was placed in service because inadequate controls existed for checking the operable status of the demineralizers prior to placing them in service. When the error was discovered on September 25, 1984, the redundant loaded "A" liquid waste mixed bed clarifier demineralizer was placed in service.

Additional investigation of the liquid radwaste treatment system disclosed that the liquid waste mixed bed clarifier demineralizers were not in service from July 11, 1984 to September 10, 1984. During this time period, projected doses to Unrestricted Areas due to liquid waste effluent were above the limits specified in T.S. 3.11.1.3. The liquid waste demineralizers were not in service as a result of administrative error.

The high level liquid radwaste treatment system was fully operational throughout these times and high level liquid radwaste was properly demineralized prior to discharge to the clarifier. The dose to the maximum exposed member of the public from radioactive materials in released clarifier effluents did not exceed the limits specified in T.S. 3.11.1.2 for the then current quarter. Therefore the health and safety of the public were not affected.

In order to prevent recurrence of similar events, Operations personnel were instructed of the importance of verifying clarifier demineralizer status when required to place them in service. Operating Procedures for the Liquid Waste System (EIIS System Identifier WD) will be reviewed for adequacy. Proper controls will be included to ensure that the status of the clarifier demineralizers are verified when they are required for service. Health Physics Procedures concerning liquid effluent dose projections will be reviewed and revised as necessary so that appropriate administrative controls exist for ensuring that the liquid waste mixed bed clarifier demineralizers are placed in service when required by T.S. 3.11.1.3.

This event is reportable as a Special Report pursuant to Unit 1 and Unit 2 Technical Specifications 3.11.1.3.a and 6.9.2.

Vepco

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION
P. O. BOX 402
MINERAL, VIRGINIA 23117

January 24, 1985

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

Serial No. N-84-022A
NO/JRR: 11
Docket No. 50-338

License No. NPF-4

Dear Sirs:

The Virginia Power Company hereby submits the following update License Event Report applicable to North Anna Unit No. 1.

Report No. LER 84-013-01

This report has been reviewed by the Station Nuclear Safety and Operating Committee and will be forwarded to Safety Evaluation and Control for their review.

Very Truly Yours,

E. Wayne Harrell
Station Manager

Enclosures (3 copies)

cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 2900
Atlanta, Georgia 30303

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