

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Waterford 3 Steam Electric StationDOCKET NUMBER (2)
0 5 0 0 0 3 8 2PAGE (3)
1 OF 4

TITLE (4)

Automatic Actuation of RPS

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	4	0	4	8	5	8	5	0	1	3	0	0	0	0	0	0
									N/A	0	5	0	0	0	0	0
									N/A	0	5	0	0	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)									
POWER LEVEL (10)	0115	20.402(b)	20.406(e)	X	50.73(a)(2)(iv)	73.71(b)					
		20.406(a)(1)(i)	50.36(e)(1)		50.73(a)(2)(v)	73.71(e)					
		20.406(a)(1)(ii)	50.36(e)(2)		50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)					
		20.406(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)						
		20.406(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)						
		20.406(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(ix)						

LICENSEE CONTACT FOR THIS LER (12)
NAME
O.D. Hayes, Operations SuperintendentTELEPHONE NUMBER
AREA CODE
5 10 14 4 6 14 1 - 3 1 1 18

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	CIB	IRIVC	71019	N					
X	SID	FCIV	N1120	N					

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

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

ABSTRACT

At 0430 hours Central Standard Time on April 4, 1985 Waterford 3 Steam Electric Station was at 15% reactor power when Operations Personnel, while performing a routine Reactor Coolant System leakage test, calculated an unidentified leakage of 1.7 gallons per minute. At 1007 hours, while attempting to identify the leakage, an uncomplicated reactor trip, coincident with an Emergency Feedwater Actuation Signal, occurred due to low water level in the Steam Generators. Plant conditions were stabilized in mode 3. At 1319 hours Operations Personnel initiated a plant cooldown in accordance with Technical Specification 3.4.5.2. However, since the leak did not originate from the Reactor Coolant System, the above shutdown was not required.

The above events were reported to the Commission pursuant to 10CFR50.72(b)(2)(ii) and 10CFR50.72(a)(1)(i).

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

NARRATIVE

At 0135 hours Central Standard Time on April 4, 1985 Waterford 3 Steam Electric Station was at 15% reactor power when Operations Personnel commenced procedure OP-903-024, RCS Inventory Balance. At 0430 hours the results of the calculation revealed an unidentified leakage of 1.7 gallons per minute. In an effort to verify the above calculation, Operations Personnel performed OP-903-024 again, and immediately initiated steps to both identify and reduce the leak. It was suspected that the excessive leakage was due to the failure of letdown Volume Control Tank relief valve, CVC-115, to properly seat after it inadvertently lifted on April 3, 1985.

During the process of positively identifying the leak, at 1002 hours Main Feedwater Pump B tripped on low suction pressure. Water levels in the Steam Generators began to decrease until 1007 hours when the reactor trip and Emergency Feedwater Actuation Signal setpoint was reached. Operations Personnel immediately entered Emergency Procedure OP-902-000, Emergency Entry Procedure and OP-902-001, Uncomplicated Reactor Trip Recovery Procedure. Plant conditions were stabilized in mode 3. Since the unidentified leakage was greater than 1 gallon per minute, an Unusual Event was declared at 1318 hours, and subsequently Operations Personnel initiated a plant cooldown.

Additionally, a small amount of radioactivity was detected in the secondary system, and Plant Personnel initially assumed that there was some Steam Generator tube leakage. However, after reviewing the available facts and validating (plant monitoring and manual sampling) data, Plant Management concluded that the excessive leakage was due to CVC-115, as mentioned above. (A walkdown of the affected systems, along with follow up sampling, identified a flow path from the Reactor Coolant System via the leak in CVC-115 to the Boric Acid Concentrator steam chest vent. The contaminated water flowed to the Gland Seal Leakoff Tank and back into the main condenser. From the condenser, the contaminated condensate made its way into the Steam Generators via the normal secondary system flow path. The decision to cooldown was a conservative one, however, since safety valve leakage in an isolable auxiliary system, once identified, does not constitute Reactor Coolant System leakage.)

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APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

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

At 1024 hours on April 5, 1985, the unidentified leakage rate decreased below 1 gallon per minute and Waterford 3 secured from the Unusual Event. CVC-115 was subsequently repaired.

As a result of the radioactive leak into the secondary system, a small amount of radioactivity was discharged to the Waterford 3 metal waste pond via the Steam Generator Blowdown System on April 4, 1985. Prior to the subject event, the Steam Generator Blowdown System was aligned to the pond, as described in procedure OP-3-010, Steam Generator Blowdown, in order to correct a chemical imbalance in the secondary system (unrelated to the subject event). Although the discharge was well within the limits specified in 10CFR Part 20, and no release to the Unrestricted Area, as described in Technical Specifications, occurred, the licensee is reviewing the implications of this event for a possible unreviewed safety question as defined in 10CFR50.59. Until this question is resolved, the licensee has administratively and mechanically secured the subject discharge path.

Although a specific reporting requirement was not obvious at the time of this report, the information above was included in order to inform the Commission of the steps being taken on the part of the licensee.

SAFETY CONSEQUENCES AND IMPLICATIONS

The above event resulted in an actuation of the Reactor Protective System during initial Startup testing in which no primary system parameters were exceeded. Since the Control Element Assemblies and the Reactor Protective System functioned as designed, and since no problems with Reactor Coolant System integrity were detected, the event in no way placed Waterford 3 in a degraded safety condition.

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CORRECTIVE ACTION

Upon investigation, plant personnel attributed the feedwater pump trip to a broken yoke, as described in Condition Identification Work Authorization 16936, on valve CD-137C, condenser mini-recirc valve. Because of the broken yoke, CD-137C opened, increasing the flow of condensate water to the condenser hotwell, resulting in a low suction pressure condition in the operating feedwater pump. To alleviate this condition, Station Modification 867 added a flow orifice to the recirculation line in order to limit condensate bypass flow to the condenser.

The leak path from the radioactive relief collection header to the Boric Acid Concentrator steam chest vent has been eliminated by Station Modification 461.

SIMILAR EVENTS

Licensee Event Reports (LER) - 85-004, -85-007, -85-008, and -85-010 reported actuations of the Reactor Protective System.

PLANT CONTACT

O.D. Hayes, Operations Superintendent, 504/464-3118



LOUISIANA
POWER & LIGHT

WATERFORD 3 SES • P.O. BOX 8 • KILLONA, LA 70066

May 3, 1985

W3P85-1246
A4.05

Director, Office Nuclear Reactor Regulation
ATTENTION: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Reporting of Licensee Event Report

Dear Sirs:

Attached is Licensee Event Report Number LER-85-013-00 for the Waterford 3 Steam Electric Station. This Licensee Event Report is submitted per 10CFR50.73(a) (2) (iv).

Very truly yours,

K.W. Cook
Nuclear Support & Licensing Manager

KWC:GEW:eao

Attachment

cc: R.D. Martin, G.W. Knighton, D.M. Crutchfield, NRC Resident Inspectors
Office, INPO Records Center, (J.T. Wheelock), E.L. Blake,
W.M. Stevenson

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