Entergy

Entergy Operations, Inc.
17265 River Road
Killona, LA 70066
Tel 504 739 6379

Everett P. Perkins, Jr.
Director, Nuclear Safety Assurance
Waterford 3

W3F1-2000-0129
A4.05
PR

September 21, 2000

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

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

Gentlemen:

Attached is Licensee Event Report (LER) 00-007-00 for Waterford Steam Electric Station Unit 3. This report provides details of a non-compliance with Technical Specification 3.3.3.1. This condition is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B).

There are no commitments contained in this submittal. If you have any questions concerning this LER, please contact G. Chris Pickering at (504) 739-6256.

Very truly yours,

Everett P. Perkins Jr.

E.P. Perkins, Jr.
Director,
Nuclear Safety Assurance

EPP/GCP/rtk
Attachment

cc: E.W. Merschoff, (NRC Region IV), N. Kalyanam, (NRC-NRR),
A.L. Garibaldi, P. Lewis - INPO Records Center,
J. Smith, N.S. Reynolds, NRC Resident Inspectors Office,
Louisiana DEQ/Surveillance Division

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NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

Estimated burden per response to comply with this mandatory information collection request: 50.0 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Waterford Steam Electric Station, Unit 3	05000-382	1 of 5

TITLE (4)
Technical Specification Action not met due to an Invalid Sample for an Inoperable Radiation Monitor.

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 NAME	DOCKET NUMBER
									N/A	N/A
08	24	00	00	007	00	09	21	00	FACILITY NAME N/A	DOCKET NUMBER N/A

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)							
POWER LEVEL (10)	100		20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
			20.2203(a)(2)(i)		20.2203(a)(3)(i)		50.73(a)(2)(ii)		50.73(a)(2)(x)
			20.405(a)(1)(ii)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
G. Chris Pickering / Licensing Engineer	(504) 739-6256

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 EPIX

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 15 single-spaced typewritten lines) (16)

On 8/24/2000, it was discovered that the eight-hour grab samples taken for an out of service radiation monitor did not meet the intent of the Technical Specification Action Statement. This condition was discovered when plant personnel questioned the validity of the samples being taken from the Component Cooling Water (CCW) system to comply with the Technical Specification (TS) 3.3.3.1 Action Statement.

The causal factor was determined to be the omission of relevant information in plant procedures. A valid sample was taken upon discovery of this condition, and data from the operable CCW A and B monitors was reviewed. The data did not indicate a higher trend in activity. This event did not threaten the health and safety of the public or plant personnel, and the safety significance of this event is negligible. This event is not considered a Safety System Functional Failure (SSFF).

REPORTABLE OCCURRENCE

On 8/24/2000, it was discovered that the eight-hour grab samples taken for an out of service radiation monitor did not meet the intent of the Technical Specification Action Statement. This event is being reported under 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by the plant's Technical Specifications.

INITIAL CONDITIONS

At the time the event was discovered, Waterford 3 was operating in Mode 1 at approximately 100% reactor power. The CCW [CC] A/B radiation monitor [IL] was out of service when this event was discovered. During this out-of-service time, the flow to the monitor was isolated, and the sample point was changed. No other structures, systems or components were out of service that contributed to this event.

EVENT DESCRIPTION

At 2040 on 8/20/2000, Component Cooling Water (CCW) radiation monitor A/B was declared inoperable for scheduled maintenance. A Departmental Action Notice was issued to collect eight-hour grab samples to comply with the Action Statements for Technical Specification (TS) 3.3.3.1 which requires the samples to be taken every eight hours until the monitor is returned to service.

CE-003-510, "Technical Specification Action Statement Compliance," was used to determine the sample location. The CCW A/B radiation monitor is located at the +21' RAB outside the CCW Pump [P] room. This component monitors the CCW A/B Header flow returning from containment, giving early indication of Reactor Coolant Pump (RCP) leakage. The sample location is normally at the radiation monitor drain valve. The alternate sample point for the CCW A/B radiation monitor is indicated as the discharge line of the CCW A/B pump.

The initial grab samples were taken from the CCW A/B radiation monitor drain valve as directed by CE-003-510. During the period the radiation monitor was out of service, flow was isolated to the monitor, and the sample point was changed to the alternate. At approximately 1700 on 8/24/2000, chemistry

personnel questioned the validity of the alternate sample location while observing the evolution. It was also noticed that the CCW A/B pump was not running when this sample was being taken from the pump discharge. After investigating the system and discussing the sample point with Operations, it was determined that the alternate sample location was not a valid sample point. The discharge of the CCW A/B Pump is not representative of the normal sample flow the monitor receives from the return header.

This event is reportable as a condition prohibited by plant Technical Specifications per 10CFR50.73(a)(2)(i)(B). The eight-hour grab sample was being taken to comply with the action statement, but the sample did not meet the intent of the action statement.

CAUSAL FACTORS

The causal factor is the omission of relevant information in plant procedures. Procedure CE-003-510, "Technical Specification Action Statement Compliance," is used by the Chemistry Department to obtain grab samples, and it groups all three of the CCW radiation monitors together. This is inconsistent with the application of the monitors. CCW radiation monitors A and B are used to detect source levels in the CCW header loop. The CCW radiation monitor A/B is used to monitor source levels of the system downstream of the reactor coolant pumps as an early detection method for Reactor Coolant System (RCS) leakage. The procedure does not consider applicability of sample locations to system configuration and does not specify alternate sample points for the CCW system when the monitors have lost flow. Other plant procedures reference sampling the CCW system, but do not give any additional details to collect adequate samples.

A contributing cause was that the uniqueness of the system configuration was not made apparent to the Chemistry staff. The lack of knowledge of the isolated monitor configuration led to incorrect assumptions while selecting an alternate sampling point. The Chemistry personnel assumed that the

CCW A/B pump supplied the A/B loop in parallel with the A and B loops. The purpose of the CCW radiation monitor A/B was not fully understood. In addition, chemistry personnel only used noise in the room caused from flow through other CCW piping as an indication that the pump was running instead of verifying the operation of the pump. With the pump not running, the samples would have been invalid even if they had been taken from a representative location in the system.

CORRECTIVE ACTIONS

After the condition was discovered, the radiation monitor was unisolated and flow was restored to CCW A/B radiation monitor. With normal flow to the radiation monitor, representative samples were taken from the radiation monitor drain at the required frequency until the radiation monitor was returned to service.

The data from the CCW A and B radiation monitors was reviewed for trending or an increase in activity of the CCW system. The data showed no increase in activity.

Other corrective actions are being addressed through the Waterford 3 corrective action program.

SAFETY SIGNIFICANCE

The CCW A/B radiation monitor is used to monitor the return line from the RCP heat exchangers. While samples were taken from the CCW A/B pump discharge, the intent of the TS 3.3.3.1 Action Statement for grab sampling was not met.

CCW radiation monitors A and B were in-service during the time CCW radiation monitor A/B was taken out of service. Leakage of the RCS through the RCP heat exchanger would have caused an increase the CCW system activity. CCW radiation monitors A and B would have trended higher and indicated this problem.

The UFSAR Chapter 15 dose analyses do not explicitly account for additional activity coming from the

CCW system during an accident, since this is a closed system with typically low activity levels. Events (i.e. a letdown heat exchanger break) which could increase the CCW activity levels would be bounded by existing dose events (LOCA, MSLB, SS/SR, etc.) and the remaining two operable CCW radiation monitors would detect any activity increase.

Since the CCW A and B radiation monitors were operable, the assumptions used in the UFSAR Chapter 15 radiological consequence analyses remain valid and the safety significance to the public is negligible. Additionally, the data from the operable detectors was reviewed, and no increase in activity was noted.

This event is not considered a Safety System Functional Failure (SSFF).

SIMILAR EVENTS

There have been no similar reportable events regarding missed Technical Specifications due to an invalid grab sample.

ADDITIONAL INFORMATION

Energy Industry Identification System (EIIS) codes are identified in the text within brackets [ ].