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ACCESSION NBR: 8809150012 DOC. DATE: 88/09/09 NOTARIZED: NO DOCKET #
 FACIL: 50-296 Browns Ferry Nuclear Power Station, Unit 3, Tennessee 05000296
 AUTH. NAME AUTHOR AFFILIATION
 BAKER, R. L. Tennessee Valley Authority
 CAMPBELL, G. G. Tennessee Valley Authority
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 88-002-00: on 880811, unplanned RWCU isolation due to personnel error.

W/8 ltr.

DISTRIBUTION CODE: IE22D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 4
 TITLE: 50.73 Licensee Event Report (LER), Incident Rpt, etc.

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) BROWNS FERRY UNIT 3	DOCKET NUMBER (2) 0 5 0 0 0 2 9 6	PAGE (3) 1 OF 0 3
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TITLE (4)
UNPLANNED REACTOR WATER CLEANUP ISOLATION DUE TO PERSONNEL ERROR

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)
08	11	88	88	002	00	09	09	88				0 5 0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)												

OPERATING MODE (9) N	20.402(b)	20.405(c)	<input checked="" type="checkbox"/>	60.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 01010	20.405(a)(1)(i)	60.38(c)(1)	<input type="checkbox"/>	60.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	60.38(c)(2)	<input type="checkbox"/>	60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	60.73(a)(2)(i)	<input type="checkbox"/>	60.73(a)(2)(vii)(A)	
	20.405(a)(1)(iv)	60.73(a)(2)(ii)	<input type="checkbox"/>	60.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	60.73(a)(2)(iii)	<input type="checkbox"/>	60.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME Richard L. Baker, Engineer, Plant Operations Review Staff	TELEPHONE NUMBER 2 0 5 7 2 9 1 - 2 5 3 8
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD'S	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD'S

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On August 11, 1988, at 0800 hours, with all three Browns Ferry units defueled, the temperature indicating switch (TIS) monitoring the discharge of the unit 3 reactor water cleanup (RWCU) nonregenerative heat exchanger initiated an isolation of the RWCU system. This isolation function is an engineered safety feature (ESF) of the primary containment isolation system. At the time of this event plant personnel were decontaminating the panel which houses the TIS. During an investigation of the cause of the event the instrument mechanics discovered that the setpoint knob, located on the front of the TIS, was turned from the original calibrated setpoint of 140 degrees fahrenheit to 52 degrees fahrenheit. This change in the setpoint has been attributed to inadvertent personnel error during the decontamination process. The TIS was recalibrated to the original setpoint and the RWCU system was returned to service at 1430 hours. This is considered an isolated event since no other events of a similar nature have been recorded. All decontamination crews have been reminded to use caution when decontaminating any plant panels due to possible ESF actuations.

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PDR ADOCK 05000296
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Handwritten signature/initials



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) BROWNS FERRY UNIT 3	DOCKET NUMBER (2) 0 5 0 0 0 2 9 6	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 368A's) (17)

Description of Event

On August 11, 1988, at 0800 hours, with all three Browns Ferry units defueled, the unit 3 reactor water cleanup (RWCU) system (EIIS code CE) isolated. This isolation function is an engineered safety feature (ESF) of the primary containment isolation system (EIIS code JM). The RWCU isolation was caused by a reduced trip setpoint on temperature indicating switch (TIS) (EIIS code TIS) 69-11. This TIS is designed to isolate the RWCU system on high temperature of the water downstream of the nonregenerative heat exchanger. Flow control valves (FCV) 69-1 and 69-12 closed and B RWCU pump tripped as designed. FCV 69-2 would have normally closed as designed, but it remained open because its power was removed under a hold order. At the time of this event, plant personnel were decontaminating the panel which houses TIS-69-11. The instrument mechanics checked TIS-69-11 and found the setpoint knob, located on the front of the TIS, was turned from the original calibrated setpoint of 140 degrees fahrenheit to 52 degrees fahrenheit. The instrument was recalibrated to the original setpoint and the RWCU system was returned to service at 1430 hours.

Cause of Event

The isolation of the RWCU system was caused by the inadvertent personnel error of accidentally turning the TIS setpoint knob during the decontamination process. No member of the decontamination crew was aware that the setpoint on TIS-69-11 had been changed. However, because of the physical location of the setpoint control knob, the setpoint could have accidentally been changed by contact with a rag, brush, etc. without the individual realizing it.

Analysis of Event

The RWCU system is designed to provide continuous mechanical filtration and chemical demineralization of reactor water. This system is also designed to isolate upon a high temperature indication at the discharge of the RWCU nonregenerative heat exchanger. This system functioned exactly as designed. The isolation of the RWCU system due to high water temperature downstream of the nonregenerative heat exchanger is a non-safety function to reduce reactor water temperature to acceptable levels for the resin material used in the filter demineralizers. The temporary loss of RWCU had a negligible effect on reactor water chemistry. The associated technical specification requirements for monitoring water chemistry parameters and the implementing procedures provide early detection for any chemistry problems that could result from the loss of RWCU. If this event had occurred during power operation, there would have been no effect on plant safety. As stated above, water chemistry monitoring would provide required protection to equipment from any chemical parameter approaching a technical specification limit.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8	0 0 2	0 0	0 3	OF	0 3

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

Corrective Action

During an investigation of the cause of the event the instrument mechanics discovered that the setpoint knob, located on the front of the TIS, was turned from the original calibrated setpoint of 140 degrees fahrenheit to 52 degrees fahrenheit. The TIS was reset and calibrated to the original setpoint of 140 degrees fahrenheit and the RWCU system was returned to service at 1430 hours. This is considered an isolated event since no other events of a similar nature have been recorded.

All decontamination crews have been reminded to use caution when decontaminating any plant panels due to possible ESF actuations. No further corrective action is planned.

Previous Similar Events - None

Commitments - None



TENNESSEE VALLEY AUTHORITY
Browns Ferry Nuclear Plant
Post Office Box 2000
Decatur, Alabama 35602

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

Dear Sir:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 3 - DOCKET
NO. 50-296 - FACILITY OPERATING LICENSE DPR-68 - REPORTABLE OCCURRENCE REPORT
BFRO-50-296/88002

The enclosed report provides details concerning the unplanned reactor water
cleanup isolation due to personnel error. This report is submitted in accordance
with 10 CFR 50.73 (a)(2)(iv).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. McKeon for

Guy G. Campbell
Plant Manager
Browns Ferry Nuclear Plant

Enclosures

cc (Enclosures):

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U.S. Nuclear Regulatory Commission
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INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339

NRC Resident Inspector, Browns Ferry Nuclear Plant

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