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January 3, 2000

Energy to Serve Your World™

Docket No.:

50-364

NEL-99-0488

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Joseph M. Farley Nuclear Plant - Unit 2
Licensee Event Report 99-003-00
Technical Specification 3.0.4 Not Met During Mode Changes
Due To 600 Volt Load Center Room Cooler Inoperable

#### Ladies and Gentlemen:

Joseph M. Farley Nuclear Plant - Unit 2 Licensee Event Report No. 99-003-00 is being submitted in accordance with 10 CFR 50.73(a)(2)(i). There are no NRC commitments in the Licensee Event Report.

If you have any questions, please advise.

Respectfully submitted,

Dave Morey

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Attachment

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## Page 2 U. S. Nuclear Regulatory Commission

cc: <u>Southern Nuclear Operating Company</u> Mr. L. M. Stinson, General Manager - Farley

U. S. Nuclear Regulatory Commission, Washington, D. C. Mr. L. M. Padovan, Licensing Project Manager – Farley

U. S. Nuclear Regulatory Commission, Region II

Mr. L. A. Reyes, Regional Administrator

Mr. T. P. Johnson, Senior Resident Inspector - Farley

LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)						APPROVED OMB NO. 3150-0104 EXPIRES: 06/30/2001 Estimated burden per response to comply with this mandatory information request: 50 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.																		
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-space typewritten lines) (16)

On December 12, 1999 at 2130, with Unit 2 in Mode 3, it was determined that Farley Nuclear Plant (FNP) Unit 2 had operated in a condition prohibited by Technical Specifications (TS). TS 3.8.2.1 requires that two trains of AC electrical busses and load centers be operable in Modes 1, 2, 3, and 4. While reviewing readiness for Mode 2 entry, the Shift Supervisor (SS) noted that the 600-Volt Load Center 2E Room Cooler, which is necessary attendant equipment for one of the two trains of AC busses, was tagged out. Therefore, the provisions of TS 3.0.4 had not been met when Mode 4 was entered on December 10, 1999 at 1507, or when Mode 3 was entered on December 11, 1999 at 1848. The provisions of TS 3.8.2.1 had not been met upon failure to meet the time limits of TS 3.8.2.1 action "a" on December 12, 1999 at 0507. Upon detection, action was immediately initiated to return the room cooler to service and was completed on December 12, 1999 at 2304. A review of other equipment removed from service (tagged out) was performed and identified no other adverse impacts on mode changes. This event is due to inadequate procedure in that procedural guidance to verify the operability of the room cooler was not required until a later mode entry, nor did procedural guidance exist to verify the acceptability of all tagged out equipment for mode changes on startup. This event is also due to inadequate communications in that the decision to work on the room cooler at a later date was not communicated to tagging officials. The return to service checklist procedure has been revised to require reviews of active tagging orders prior to mode changes during plant startup, and performance of the ventilation system checklist prior to Mode 4. The return to service checklist procedure will be reviewed for other system alignment checklists that may be assigned to the incorrect mode and corrected. These actions will be complete by March 1, 2000. This event does not represent a Safety System Functional Failure.

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#### **U.S.NUCLEAR REGULATORY COMMISSION**

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)		PAGE (3)		
		YEAR	SEQUENTIAL REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 2	05000364	1999	$ - 0 \ 0 \ 3 \  - 0 \ 0 \  $	2 OF 4

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

Westinghouse -- Pressurized Water Reactor Energy Industry Identification Codes are identified in the text as [XX].

## **Description of Event**

At the beginning of the Unit 2 Thirteenth Refueling Outage (2R13) an administrative limiting condition for operation (LCO) was initiated to track work orders on plant equipment required to be complete prior to Mode 4 entry. The LCO required that all work orders on the "Mode 4 Work Order List" (i.e., work orders scheduled for 2R13 and coded "M4") must be functionally accepted or otherwise resolved prior to Mode 4 entry. The list of these work orders was kept in an electronic database.

On November 12, 1999, with the reactor defueled, the 600-Volt Load Center 2E Room Cooler [VF] was tagged out to perform work listed on the Mode 4 Work Order List, which required the room cooler to be inoperable. Necessary local compensatory actions to maintain the room temperature within limits were established

Based on re-evaluation of the need for the work, it was determined that the work on the room cooler could be deferred to the next refueling outage (2R14), and the work order outage code was changed from 2R13 to 2R14. It is believed that this change was made on December 2, 1999 with Unit 2 in Mode 6. This action effectively removed the applicable work order from the Mode 4 Work Order List, but did not ensure removal of the associated tagging order.

On December 10, 1999 at 1500, the previously referenced administrative LCO for Mode 4 entry was cleared based on no remaining work orders on the Mode 4 Work Order List. With other Mode change preparations complete, the Unit entered Mode 4 on December 10, 1999 at 1507 and entered Mode 3 on December 11, 1999 at 1848.

On December 12, 1999 at 2130, while reviewing readiness for Mode 2 entry, the Shift Supervisor (SS) noted that the 600-Volt Load Center 2E Room Cooler was removed from service (tagged out). He determined that it was necessary attendant equipment for the required electrical busses and load centers, and initiated action to restore the room cooler to service. The room cooler was returned to service on December 12, 1999 at 2304.

TS 3.8.2.1 requires that two trains of AC busses and load centers be operable in Modes 1, 2, 3, and 4. With less than two trains operable, TS 3.8.2.1 action "a" requires restoration within 8 hours or the Unit placed in Hot Standby within the following 6 hours and Cold Shutdown within the following

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#### U.S.NUCLEAR REGULATORY COMMISSION

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	1	LER NUMBER (6)	PAGE (3)
		YEAR	SEQUENTIAL REVISION NUMBER	
Joseph M. Farley Nuclear Plant - Unit 2	05000364	1999	$ - _{0\ 0\ 3} - _{0\ 0} $	3 OF 4

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

30 hours. Therefore, the provisions of TS 3.0.4 had not been met when Mode 4 was entered on December 10, 1999 at 1507, or when Mode 3 was entered on December 11, 1999 at 1848. The provisions of TS 3.8.2.1 were not met upon failure to meet the time limits of TS 3.8.2.1 action "a" on December 12, 1999 at 0507.

### Cause of Event

This event is due to inadequate procedure in that:

Procedural guidance to verify the operability of the room cooler was associated with other ventilation system requirements that are not applicable until entry into later modes. The room cooler alignment was covered by two checklists, but neither was required to be completed prior to Mode 4 entry. In addition, procedural guidance to require review of all outstanding tagouts prior to mode changes on startup did not exist.

This event is also due to inadequate communications in that the work schedule change was not communicated to persons responsible for control of tagging orders.

### Safety Assessment

This event occurred prior to power operation during a post - refueling outage startup when decay heat in the reactor was minimal. The normal air conditioning system for this room remained operable throughout this event and would have supported operation of the affected electrical distribution systems except in the event of a Loss of Off Site Power (LOSP). Local compensatory measures to monitor the room temperature every 4 hours were in effect.

In addition, the service water through the room cooler remained in service throughout the event and would have provided some natural circulation cooling of the room in an LOSP event. Initial room temperature was 75 degrees. The TS limit of the air temperature of the room is 150 degrees F. Calculations show that at least 10 hours would be required to heat the room to 150 degrees after a design basis accident event. Restoration of the tagging order required only repositioning of the thermostat and fan breaker and therefore could be, and in fact was, accomplished easily within two hours. The breaker is located in an area that is expected to be accessible under re-entry controls during postulated accident conditions. Therefore, the probability of actual failure of the electrical distribution system in this room to perform its design safety function during this event was quite low.

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#### **U.S.NUCLEAR REGULATORY COMMISSION**

# LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)		LER NUMBER (6)	PAGE (3)	
	:	YEAR	SEQUENTIAL REVISION NUMBER		
Joseph M. Farley Nuclear Plant - Unit 2	05000364	1999	-003-00	4 OF 4	

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

Therefore, the health and safety of the public were unaffected by this event.

Since the redundant train remained operable throughout this event, it does not represent a Safety System Functional Failure.

### Corrective Action

A review of other equipment removed from service (tagged out) was performed and identified no other adverse impacts on mode changes.

The return to service checklist procedure has been revised to require reviews of active tagging orders prior to mode changes on startup, and performance of the ventilation system checklist prior to Mode 4.

The return to service checklist procedure will be reviewed for other system alignment checklists that may be assigned to the incorrect mode and corrected accordingly.

The procedure for Outage Schedule Change Requests will be revised to identify tagging order numbers associated with the work being rescheduled, and to provide for notification to tagging officials of the change.

These actions will be complete by March 1, 2000.

#### Additional Information

The following LER's have been submitted in the past two years on the subject of failure to operate in accordance with TS during mode changes due to inadequate procedures:

LER 97-005-02 (Shared) Failure to Perform Nuclear Instrumentation Surveillance Requirements Prior to Mode 2 and 3 Entry

LER 98-006-00 (Unit 2) Containment Penetration Overcurrent Protective Device Energized Due to Inadequate Procedure