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September 13, 2010

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

Subject: Oconee Nuclear Station
Docket No. 50-270
Licensee Event Report 270/2010-01, Revision 0
Problem Investigation Process No.: O-10-5561

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 270/2010-01, Revision 0, regarding operation in a condition prohibited by Oconee Technical Specifications. The prohibited condition was an inoperable Standby Shutdown Facility (SSF) for a period of time which exceeded the required action time allowed by Limiting Condition for Operation (LCO) 3.10.1.

This report is being submitted in accordance with 10 CFR 50.73 (a)(2)(i)(B).

There are no regulatory commitments contained in this report.

This event is considered to be of no significance with respect to the health and safety of the public.

Cause analysis for this event is not yet complete. Results will be provided in a supplement to this report.

IE22
NRR

Any questions regarding the content of this report should be directed to Russ Oakley at 864-873-3829.

Sincerely,

Dave Baxter, Vice President
Oconee Nuclear Site

Attachment

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION
(9-2007)

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE
Operation Prohibited by TS Due to Removal of West Penetration Room Brick Wall Support Girts

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									None	05000
07	2	2010	2010	- 01	00	09	13	2010	FACILITY NAME	DOCKET NUMBER
									None	05000

9. OPERATING MODE
1

10. POWER LEVEL
100%

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

20.2201(b)	20.2203(a)(3)(i)	50.73(a)(2)(i)(C)	50.73(a)(2)(vii)
20.2201(d)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(A)
20.2203(a)(1)	20.2203(a)(4)	50.73(a)(2)(ii)(B)	50.73(a)(2)(viii)(B)
20.2203(a)(2)(i)	50.36(c)(1)(i)(A)	50.73(a)(2)(iii)	50.73(a)(2)(ix)(A)
20.2203(a)(2)(ii)	50.36(c)(1)(ii)(A)	50.73(a)(2)(iv)(A)	50.73(a)(2)(x)
20.2203(a)(2)(iii)	50.36(c)(2)	50.73(a)(2)(v)(A)	73.71(a)(4)
20.2203(a)(2)(iv)	50.46(a)(3)(ii)	50.73(a)(2)(v)(B)	73.71(a)(5)
20.2203(a)(2)(v)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(C)	OTHER
20.2203(a)(2)(vi)	X 50.73(a)(2)(i)(B)	50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Russ Oakley, Senior Compliance Engineer	(864) 873-3829

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED				15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
X	YES (If yes, complete EXPECTED SUBMISSION DATE)		NO		11	12	2010

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On July 14, 2010, Oconee Nuclear Station (ONS) discovered that workers had removed support girts from the Unit 2 West Penetration Room brick wall that were required to maintain seismic adequacy of the wall. Failure of this wall could damage Standby Shutdown Facility (SSF) cables. Damage to these cables could have caused the SSF Reactor Coolant Makeup and Auxiliary Service Water functions to be inoperable for a seismically-induced Turbine Building Flood Event.

Technical Specification (TS) Limiting Condition for Operation (LCO) 3.10.1 was not met in this condition. This condition existed for approximately fourteen days, which exceeded the seven-day required action time of the LCO. Consequently, ONS Unit 2 operated in a condition prohibited by TS for approximately seven days as a result of this condition.

Prompt corrective action was taken to re-install the required support girts. This work was completed on July 16, 2010.

This event is of no significance with respect to public health and safety.

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

EVALUATION:

BACKGROUND

The Oconee Standby Shutdown Facility (SSF)[NB] is designed as a standby system for use under emergency conditions. The system provides additional "defense in depth" protection for the health and safety of the public by serving as a backup to existing safety systems. The SSF functions to mitigate the consequences of various events such as fire, flood, sabotage, and station blackout. The seismically-induced Turbine Building Flood Event is one SSF-mitigated event within the Oconee current licensing basis (CLB). This event will result in the flooding and consequent inoperability of all Emergency Feedwater [BA] Pumps [P]. The SSF functions in this event to bring the plant to hot standby conditions for a period of up to 72 hours. The SSF Auxiliary Service Water (ASW)[BA] System provides secondary side heat transfer and the SSF Reactor Coolant Makeup System provides Reactor Coolant System (RCS)[AB] inventory control and seal cooling. Due to the potential failure of the Unit 2 West Penetration Room wall during a postulated seismic event and the potential damage the collapsed wall could cause to the nearby SSF cables [CBL], the SSF ASW System and SSF RC Makeup System were declared inoperable. The condition existed for a period of time exceeding the allowed SSF outage time permitted by Technical Specification 3.10.1. Therefore, Unit 2 operated for a period of time in a condition prohibited by Technical Specifications.

This event is reportable per 10CFR 50.73(a)(2)(i)(B).

Prior to this event Unit 2 was operating at 100% power with no safety systems or components out of service that would have contributed to this event.

EVENT DESCRIPTION

Between July 2, 2010 and July 6, 2010, Oconee workers were performing demolition of the Oconee Unit 2 West Penetration Room exterior wall siding. This activity involved removing support girts from the walls to support a planned modification to the wall. The plan for the demolition activity specified that certain support

girts (between column 78a and the Reactor Building wall) must remain in place until interior wall protective measures were installed for protection of safety related systems, structures, and components (SSCs) adjacent to the West Penetration Room wall. On July 14, 2010, Oconee discovered that required support girts had been removed from the exterior of this wall prior to implementation of the necessary protective measures on the interior side of the wall. Without support girts installed, this panel of the West Penetration Room wall cannot be assured to withstand a seismic event.

The failure of the West Penetration Room wall was evaluated for potential to damage other safety related SSCs and this evaluation concluded that failure of this wall could have damaged SSF cables which were routed nearby. The cables in question are required for the SSF to perform its required safety function in mitigation of various events within the Oconee CLB. These include fire, flood, sabotage, and station blackout. However, the Turbine Building Flood is the only SSF-mitigated event for which the CLB requires postulating a concurrent seismic event.

The SSF was declared inoperable on July 14, 2010. At that time, the SSF had been inoperable for twelve days. This is based upon the removal of three of the four support girts on July 2nd, making the wall inoperable on the first day that support girt removal was in progress. The fourth and final support girt was removed on July 6, 2010. All support girts were replaced as of July 16, 2010, and the SSF was restored to operable status. The total duration of inoperability was fourteen days. The allowed outage time for the SSF is seven days.

The decay heat removal function performed by the SSF ASW System can also be performed by the High Pressure Injection System (HPI)[BG] using feed and bleed. This system also provides normal and emergency RCS inventory control and seal cooling. Availability of the HPI system is not affected by failure of the degraded wall.

CAUSAL FACTORS

A root cause evaluation team has been formed to investigate the causes and identify appropriate corrective actions to prevent recurrence of this event. Written statements have been obtained

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

from key individuals and involved employees. Interviews with involved individuals and others with knowledge of the work performed have been conducted. Related factors such as work documents, job planning, and pre-job briefings have been evaluated to determine their potential to contribute to or prevent this event.

Various methods were used to drive out potential problems in human performance or organizational and programmatic/administrative process failures. These methods included causal factor charting, task analysis, and change and/or barrier analysis.

The root cause evaluation for this event is not yet complete. The results of this evaluation will be provided in a supplement to this LER.

CORRECTIVE ACTIONS

Immediate:

1. The Operations Shift Manager and Oconee Major Projects management were notified.

2. TS LCO 3.10.1 was entered.

3. All demolition work was suspended.

4. All work involving complex activity plans (CAPs) was suspended.

5. Reviewed existing CAPs to ensure proper restrictions were in place to identify necessary prerequisite activities.

6. Placed work orders on hold until specific and clear ties were in place for any prerequisite tasks.

Subsequent:

1. Unit 2 West Penetration Room exterior wall support girts were re-installed and operability was restored.

2. LCO 3.10.1 was exited.

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3. "Do Not Remove" signs were placed on the re-installed support girts.

4. Provided "lessons learned" communication to affected personnel.

5. Initiated audits of risk items, contingencies, and restrictions for all CAPs each day. This includes a visit to the field to verify the field conditions in regard to complex plan status.

Planned:

Planned corrective actions have been identified but have not yet received full management review. When these reviews are complete, these corrective actions will be submitted via supplement to this report.

SAFETY ANALYSIS

This event did not involve a Safety System Functional Failure.

The HPI system was available to perform the functions which would otherwise have been performed by the SSF ASW system and SSF RC Makeup System.

This event was analyzed using the current Oconee seismic PRA. The effect of losing the SSF following a seismic event was evaluated by solving the model with the SSF assumed unavailable. (For a portion of time during the period of interest, the SSF was actually out of service for preventive maintenance.)

The Incremental Conditional Core Damage Probability (ICCDP) associated with this event was determined to be less than 1E-06.

There was, therefore, no safety significance to this event and the health and safety of the public were not adversely affected.

ADDITIONAL INFORMATION

A search of Oconee's Problem Investigation Program (PIP) data base found no similar events with same or similar cause during the previous five years of operation.

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

There were no releases of radioactive materials, radiation exposures or personnel injuries associated with this event.

This event is not considered reportable under the Equipment Performance and Information Exchange (EPIX) program.