

# LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), 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.

FACILITY NAME (1)

Oconee Nuclear Station, Unit One

DOCKET NUMBER (2)

05000 269

PAGE (3)

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TITLE (4)

Breach of Technical Specification Due To Unlocked Control Rod Patch Panel

EVENT DATE (5)			LER NUMBER (6)			REPORT NUMBER (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
07	08	95	95	05	01	08	09	95		05000
									FACILITY NAME	DOCKET NUMBER
									FACILITY NAME	05000

  

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)				
	20.402(b)		20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	20.405(a)(1)(i)		50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)		50.36(c)(2)	50.73(a)(2)(vii)	OTHER
	20.405(a)(1)(iii)	X	50.73(a)(2)(i) (B)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iv)		50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)		50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME

Lanny V. Wilkie, Safety Review Manager

TELEPHONE NUMBER (Include Area Code)

(803) 885-3518

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

SUPPLEMENTAL REPORT EXPECTED (14)

YES  
(If yes, complete EXPECTED SUBMISSION DATE)

X NO

EXPECTED SUBMISSION DATE (15)

MONTH DAY YEAR

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

On July 8, 1995, at 1015 hours, with Unit 1 at 100% full power, personnel from the NRC license class were performing plant walk throughs when they discovered a Control Rod Drive Patch Panel (CRDPP) unlocked. The CRDPP's are required to be locked per Technical Specifications (TS). Attempts to lock the panel door with the key were unsuccessful because the lock mechanism was broken. Operations entered the action statement of TS 3.0 (Limiting Conditions for Operation). At 1300 TS 3.0 was exited when a security officer was stationed at the panel while repair was in progress. The repair to the lock was completed at 1610 hours on July 8, 1995. Operations completed the Control Rod Patch Verification Test and the Control Rods were found to be patched correctly at 2116 hours. Root cause was determined to be Equipment Failure. Corrective action includes revising the procedures to verify the panels are locked.

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				95	- 05	- 01	

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

BACKGROUND

The Control Rod Drive Patch Panels, located in the unit's cable room, allow any control rod drive (except the Axial Power Shaping Rods in Group 8) to be assigned to any Group. This is done by exchanging the power and instrumentation leads associated with that drive. It also allows any control rod drive mechanism except those in Group 8 to be assigned to any Position Indication (PI) meter, Out Limit lamp, Control On lamp, In Limit lamp, and Fault lamp on the control room PI panel. It also allows for the rearrangement of the order within a group for any Group 1 through 8.

Technical Specification 3.5.2.7 states "the Control Rod Patch panel shall be locked at all times with limited access to be authorized by the Station Manager or his designated alternate."

Technical Specification 4.7.2.1 states "whenever the control rod patch panel is locked (after inspection, test, reprogramming, or maintenance) each control rod drive mechanism shall be selected from the control room and exercised by a movement of approximately two inches to verify that the proper rod has responded as shown on the unit computer printout of that rod."

EVENT DESCRIPTION

On the morning of July 8, 1995, members of the current NRC License class were performing plant walk through reviews in preparation for their upcoming examination. They were in the cable room of Unit One looking for certain bypass switches when they opened an electrical distribution panel and discovered that they may have opened a Control Rod Drive Patch Panel (CRDPP). The panel door had an identification label denoting that it was the Unit 1 CRD System Logic Panel 5. They were familiar with the Technical Specifications (TS) relating to the CRDPP and at 1015 hours they notified the Shift Supervisor that a panel was discovered unlocked and it may be the CRDPP. There were no apparent signs of damage to the lock or door of the CRDPP. There was no label on the door stating the Technical Specification requirement that it be locked. The Shift Supervisor confirmed that the unlocked cabinet was the CRDPP.

The Shift Supervisor obtained the key to the CRDPP and attempted to lock it but the lock would not work. The Shift Supervisor determined that Unit One was under the Limiting Conditions for Operation (LCO) TS 3.0 which requires a Unit to be at Hot Shutdown within 12 hours. Operations issued a work request to repair the CRDPP lock.

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At 1300 hours the Shift Supervisor directed a security officer to be posted at the CRDPP to secure the panel to meet the requirements of TS 3.5.2.7. This allowed the Unit to exit the action statement of TS 3.0.

The repair to the CRDPP lock was completed at 1610 hours on July 8, 1995 and the panel was locked. The Maintenance Supervisor stated that the failure of the lock was due to the brass dogs in the locking mechanism failing.

After the CRDPP was locked, Operators performed the control rod drive patch verification at power procedure, OP/A/1105/09, Enclosure 4.11, beginning at 1615 hours and completing the procedure at 2116 hours on July 8, 1995. All rods were found to be programmed properly.

Investigation revealed that the last recorded time that the key was issued and this CRDPP was opened was on June 19, 1994 as Unit One was being returned from a refueling outage. Normal refueling testing was performed at this time. Instrument and Electrical (I&E) personnel indicated that the door was locked per the control rod drive patch verification procedure (IP/1/A/0330/002D). I&E personnel stated that they did not note anything unusual or remember a problem with the door or lock during this time. The procedures that I&E and Operations uses to lock the CRDPPs do not have a step to verify that the panels are locked.

CONCLUSIONS

The cause of the Control Rod Patch Panel being unlocked was due to the failure of the lock mechanism. The same lock and cabinets have been in service for approximately twenty-five years. The last time the lock was verified locked was June 19, 1994. The root cause is classified as Equipment Failure.

A review of previous events for the last two years reveals that this event is not recurring. There have not been any similar events of this type.

There were no NPRDS reportable failures, release of radioactive material, radiation exposure or personnel injuries associated with this event.

CORRECTIVE ACTIONS

Immediate

1. The Operation Supervisor entered the action statement of Technical Specification 3.0.

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**Subsequent**

1. A Security Guard was posted at the Control Rod Drive Patch Panel with instructions to secure the cabinet while repairs were made to the lock mechanism.
2. The lock mechanism of the Control Rod Patch Panel was repaired and the door was locked.
3. All Control Rod Drive Patch Panels on all three Oconee Units were verified to be locked.

**Planned**

1. All procedures that require the Control Rod Drive Patch Panels to be locked will have a sign-off step to lock the panel and a sign-off step to verify it locked.
2. Label the Control Rod Drive Patch Panels on all Units to clearly identify the doors as required to be locked per Technical Specification.

**SAFETY ANALYSIS**

There are no bases stated in Technical Specifications for the requirement to lock the panel. The assumed concern is with reactivity management to prevent inadvertent or unauthorized re-programming of the control rods. The intent is to give assurance that the correct rod moves when it is called upon to move. There are numerous methods and indications available to the Operators to detect a misprogrammed control rod.

During normal plant operation if a patching error is made in the patch panel, it will be discovered by a comparative check as required by the procedure anytime the patch panel is opened for maintenance, inspection, reprogramming or testing. If the power leads were disconnected the rods would be deenergized. If it was withdrawn at the time the leads were disconnected, it would drop into the core.

Another highly unlikely case would be an act of sabotage of rearranging the patch configuration. This would require knowledge beyond that of most individuals of the working components inside the patch panel in addition to a detailed understanding of core physics. The patch panel is located in a

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controlled access area of the plant which provides an additional barrier. This case of sabotage is not a credible scenario.

Therefore the health and safety of the public was not compromised by this event.