

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9910260103 DOC.DATE: 99/10/18 NOTARIZED: NO DOCKET #
 FACIL:50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana M 05000315
 AUTH.NAME AUTHOR AFFILIATION
 DEPUYDT,M.B. Indiana Michigan Power Co.
 BAKKEN,A.C. Indiana Michigan Power Co.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 99-024-00:on 990708,literal TS requirements were not met by accumulator valve surveillance.Caused by misjudgement made in conversion from initial DC Cook TS to W Std TS.Submitted license amend request.

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October 18, 1999

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Operating License DPR-58
Docket No. 50-315

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following report is being submitted:

LER 315/99-024-00, "Literal Technical Specifications Requirement Not Met By Accumulator Valve Surveillance."

There are no commitments identified in this submittal.

Sincerely,

A handwritten signature in dark ink, appearing to read "A. Bakken, III".

A. Christopher Bakken, III
Site Vice President

/srd
Attachment

c: J. E. Dyer, NRC Region III
R. P. Powers
P. A. Barrett
R. F. Godley
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LICENSEE EVENT REPORT (LER)(See reverse for required number of
digits/characters for each block)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 INFORMATION AND
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

FACILITY NAME (1) Cook Nuclear Plant Unit 1										DOCKET NUMBER (2) 05000-315		PAGE (3) 1 of 3		
TITLE (4) Literal Technical Specifications Requirement Not Met By Accumulator Valve Surveillance														
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 Cook Nuclear Plant 2		DOCKET NUMBER 05000-316			
07	08	1999	1999	- 024 -	00	10	18	1999	FACILITY NAME		DOCKET NUMBER			
OPERATING MODE (9)		5		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)										
POWER LEVEL (10)		0%		20.2201 (b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/>		50.73(a)(2)(i)		50.73(a)(2)(viii)		
				20.2203(a)(1)		20.2203(a)(3)(i)				50.73(a)(2)(ii)		50.73(a)(2)(x)		
				20.2203(a)(2)(i)		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 Ms. Mary Beth Depuydt, Regulatory Compliance										TELEPHONE NUMBER (Include Area Code) (616) 465-5901 X 1589				
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)														
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX				
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
<input type="checkbox"/> YES (If Yes, complete EXPECTED SUBMISSION DATE).					<input checked="" type="checkbox"/> NO									
Abstract (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)														
<p>On July 8, 1999, during a review of Technical Specifications (TS) surveillance procedures, it was discovered that TS Surveillance Requirement (SR) 4.5.1.c was not being met by the associated surveillance procedure. SR 4.5.1.c requires that power to the RCS accumulator isolation valve motor operator be disconnected by, "... removal of the breaker from the circuit." The surveillance procedure does not meet the literal wording of TS SR 4.5.1.c in that the breaker is opened and maintained in that position rather than being physically removed. This LER is therefore submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), as a condition prohibited by the plant's Technical Specifications.</p> <p>This condition resulted from a misjudgment made in the conversion from the initial D.C. Cook Nuclear Plant (CNP) TS to the Westinghouse Standard Technical Specifications (STS), as described in NUREG-0452. The wording appears to have been adopted from the STS without considering the type of breaker installed for the accumulator isolation valves. A license amendment request will be submitted to change TS SR 4.5.1.c. A comprehensive review of the adequacy of TS surveillance test procedures is being performed as part of Restart Action Plan #0001, "Programmatic Breakdown in Surveillance Testing."</p> <p>The identified condition has no safety significance because power was removed from the accumulator isolation valve control circuit, thereby preventing inadvertent valve operation due to a single failure in the valve control circuitry.</p>														

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

Conditions Prior to Event

Unit 1 was in Mode 5, Cold Shutdown

Unit 2 was in Mode 5, Cold Shutdown

Description of Event

On July 8, 1999, during a review of Technical Specifications (TS) surveillance procedures, it was discovered that TS Surveillance Requirement (SR) 4.5.1.c was not being met by the associated surveillance procedure. SR 4.5.1.c requires that power to the RCS accumulator isolation valve motor operator be disconnected by, "... removal of the breaker from the circuit." The surveillance procedure, 01(02)-OHP-4030.STP.031, "Operation Weekly Surveillance Checks," requires the operator to check the breaker switch in the OFF position, but the breaker is not physically removed from the cubicle. Therefore, the surveillance procedure does not meet the literal requirement of TS SR 4.5.1.c.

Cause of Event

This condition resulted from a misjudgment made in the conversion from the initial D.C. Cook Nuclear Plant (CNP) TS to the Westinghouse Standard Technical Specifications (STS), as described in NUREG-0452. The NUREG-0452, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors," accumulator isolation valve surveillance requirement appears to have been adopted without considering Cook plant design.

During conversion from the original to the STS, it was erroneously decided that the TS SR would be met by opening the molded case circuit breaker (MCCB) that supplies power to the accumulator valve operator, and maintaining the breaker in the OFF position. The investigation has shown that CNP personnel do not consider the MCCBs capable of being "racked out" due to their physical design. Instead, when directed to rack out this style of breaker, personnel understand that rack out means to place the breaker in the OFF position. While the surveillance procedure actions meet the intent of the TS by placing the breakers in the OFF position, they do not meet the literal requirement of TS SR 4.5.1.c. This condition has existed since initial plant startup.

Analysis of Event

On September 20, 1999, this condition was determined to be reportable; therefore, this LER is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), as a condition prohibited by the plant's Technical Specifications. The gap in time between the discovery date of July 8, 1999, and the reporting date of September 20, 1999, was due to the need for evaluation by D.C. Cook Nuclear Plant (CNP) staff and management due to the extended history of the issue.

TS SR 4.5.1.c requires that we periodically verify, "... that power to the isolation valve operator is disconnected by removal of the breaker from the circuit." The basis for this TS surveillance requirement is that, "... as these accumulator isolation valves fail to meet single failure criteria, removal of power to the valves is required." This CNP TS surveillance requirement and bases were adopted directly from NUREG-0452, and no plant-specific changes were made to the CNP requirement.

To physically remove a breaker from a circuit, the breaker is racked out. The term "rack out" means to use the installed racking mechanism to physically move the switchgear breaker away from the bus stabs such that the breaker is no longer in contact with the bus bars. Additionally, racking out a breaker disconnects the breaker from the control circuit such that the breaker cannot operate. Breakers that are capable of being racked out have built-in mechanisms to allow the rack out operation, and are generally found on switchgear buses.

The safety-related accumulator isolation valves are powered from the Aux 600V switchgear buses through Motor Control Centers (MCCs). The breakers used on these MCCs are not of the switchgear type, and have no mechanism for being

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racked out. Rather, the breakers used are small MCCBs, which are common for a small load of this type and voltage. The MCCBs are hard-wired to the supply lines and loads in the MCC, and are difficult to remove from their cubicles. The term "rack out" does not apply to MCCBs.

To "electrically" remove the accumulator isolation valve MCCB from the circuit, the operator merely has to open the breaker and maintain it in the OFF position. Placing the breaker in OFF de-energizes control power to the valve operator. Deliberate operator action by physically closing the breaker at the local MCC panel is required to restore valve operator control power. Opening the accumulator valve breaker when reactor system pressure is greater than 2000 psig prevents the potential for an active failure or inadvertent operation of the valve switch from the control room to cause the valves to close. No electrical fault will cause the breaker to close. Therefore, the intent of the TS is met.

Based on the above information, the identified condition has no safety significance. Opening the accumulator isolation valve breaker or removing the breaker from the circuit both remove power to the circuit and prevent inadvertent valve operation due to a single failure in the valve control circuitry.

Corrective Actions

No immediate corrective actions were required because the plant was in an operating Mode where the surveillance requirement was not applicable.

A license amendment request will be submitted by October 22, 1999, to change Technical Specifications Surveillance Requirement 4.5.1.c to read, "At least once per 31 days when the RCS pressure is above 2000 psig, by verifying that power is removed from each accumulator isolation valve operator."

As previously stated in correspondence AEP: NRC: 1260GH, dated March 19, 1999, "Enforcement Actions 98-150, 98-151, 98-152 and 98-186, Reply to Notice of Violation Dated October 13, 1998," a comprehensive review of the adequacy of TS surveillance test procedures is being performed. This action is being tracked by Restart Action Plan #0001, "Programmatic Breakdown in Surveillance Testing."

Previous Similar Events

None