Commonwealth Edisor Dresden Generating Station 6500 North Dresden Road Morris, IL 60450 Tel 815-942-2920





IE221/,

July 19, 1996

JSPLTR #96-0110

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

Licensee Event Report 96-007, Docket 50-249 is attached and is being submitted pursuant to 10CFR50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specifications.

This correspondence contains the following commitments:

1

Operations Management will counsel the involved Nuclear Station Operators on the importance of questioning equipment operability prior to reactor mode changes. (2491809600701)

2. Operations revised DGP 02-01, "Unit 2(3) Normal Unit Shutdown" and DGP 02-02, "Unit 2(3) Normal Unit Shutdown and Vessel Slow Fill" to provide more specific and/or active guidance to facilitate affirmative direction to perform the required surveillances. Long Term Corrective Action will involve a procedural change to implement a checklist of items to verify prior to changing operational modes. (2491809600702)

 Operations will include the event in a Lessons Learned lecture, to be performed with all Licensed Operators during Operations Continuing Training. (2491809600703)

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4. Instrument Maintenance Department will determine how to increase the knowledge level of their personnel, specifically in the area of Technical Specification surveillance requirements. (2491809600704)

If you have any questions, please contact Pete Holland, Dresden Regulatory Assurance Supervisor at (815) 942-2920 extension, 2714.

Sincerely,

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Sire Vice President) Dresden Station

Enclosure

cc:

H. Miller, Regional Administrator, Region III NRC Resident Inspector's Office Illinois Department of Nuclear Safety

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

With Unit 3 at 710 MWe, a normal unit shutdown commenced under the guidance of DGP 02-01, "Unit 2(3) Normal Unit Shutdown". Prior to Recirc Flow reduction to lower reactor power, the Unit 3 Unit Supervisor (US) informed an Instrument Maintenance Department Supervisor of the impending Shutdown, per DGP 02-01, Section D (Prerequisites). He did not direct the IMD Supervisor to begin executing the two surveillances which were required to be completed prior to reaching a point in the power descension when IRMs/SRMs are required for monitoring reactor power. Additionally, the NSOs and US on shift, when the IRMs/SRMs were later required, did not question if the surveillances had been completed prior to lowering power below the APRM range. When the Shutdown had been completed, a review of DGP 02-01 revealed that DIS 0700-03, "Source Range Monitor (SRM) Rod Block Functional Test" and DIS 0700-04, "Intermediate Range Monitor (IRM) Rod Block and Scram Calibration" had not been completed. Corrective actions included notification of appropriate senior management, counselling of the individuals involved, and procedural changes to provide for clearer communications and a verification that DIS 0700-03 and DIS 0700-04 have been completed prior to entering the IRM range. Safety significance of the event was minimal.

NRC FORM 366A (5-92)	U.S. NUCLEAR	REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 5/31/95					
	LICENSEE EVENT REPORT (L TEXT CONTINUATION	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 DUDCET LASUNATORY DC 20503						
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EVENT IDENTIFICATION:

Failure to perform surveillance during unit shutdown due to personnel error concerning poor communications.

A. PLANT CONDITIONS PRIOR TO EVENT:

Unit: 3	3		Event	Date:	June	20,	1996	Event	Time:	0430	
Reactor	Mode: N	1	Mode N	lame:	Run			Power	Level:	710	MWe
Reactor	Coolant	Svstem P	ressur	e: 10	20 00	ia			4		

B. DESCRIPTION OF EVENT:

This report is submitted pursuant to 10CFR50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specifications.

At 0430 on 06/20/96, a planned normal Unit 3 reactor shutdown had commenced from 710 MWe under the guidance of DGP 02-01, "Unit 2(3) Normal Unit Shutdown". Previous to Recirc Flow reduction to lower reactor power, the Unit 3 Unit Supervisor (US) [Licensed Senior Reactor Operator] informed an Instrument Maintenance Department (IMD) Supervisor [Non-licensed supervisor] at 0345 hours of the impending Shutdown. DGP 02-01, Section D (Prerequisites), Step D.4., requires this notification, and that a Control System Technician (CST) be on site to perform APRM gain adjustments and to calibrate the SRM and IRM setpoints per DIS 0700-03, "Source Range Monitor (SRM) Rod Block Functional Test" and DIS 0700-04, "Intermediate Range Monitor (IRM) Rod Block and Scram Calibration" prior to operating in the source and intermediate ranges.

At 0834 on 06/20/96 during the next shift with the reactor at 486 MWe, the shutdown continued by inserting control rods until the next shift change at 1900 hours. With the reactor at 140 MWe, the IRM/APRM Overlap surveillance, DOP 0700-02, "Intermediate Range Monitor (IRM) Operation, was performed successfully. Though the IRM/APRM overlap had been successfully completed, calibration of the SRMs and IRMs had yet to be performed, as required by the shutdown procedure.

On the afternoon shift of 06/20/96, activities continued toward completion of the Unit Shutdown. This included the transferring of auxiliary power, removal of the feedwater heaters from service and insertion of control rods.

The midnight shift of 06/21/96 began with the reactor producing 97 MWe. IMD began performing DIS 0700-17, APRM Gain Adjustments, with the surveillance completed at 0005 hours. At 0203 hours, the main turbine/generator were removed from operation. The Nuclear Station Operators (NSO) [Licensed Reactor Operator] continued to reduce reactor power until 0440 hours, at which time the reactor mode switch was moved from "Run" to "Startup", in accordance with DGP 02-01. The NSOs and US remained focused on the reactor shutdown, failing to question whether neutron instrumentation was operable to support the changing of operational reactor modes.

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Once the Shutdown had been completed, a review of DGP 02-01 by the IMD Supervisor was performed and revealed that DIS 0700-03 and DIS 0700-04 had not been completed by the IMD. Performance of these surveillances is required by Technical Specifications (T.S.) within seven days of any controlled shutdown when power will be low enough to be in the SRM/IRM range (T.S. Table 4.2.1., Note (2)).

C. CAUSE OF EVENT:

The root cause was a personnel error, NRC Cause Code A, due to poor communication by the Unit Supervisor [NRC Licensed Senior Reactor Operator] (US) to the IMD Supervisor. The US only informed the IMD Supervisor that Unit 3 was going to be shutdown, and that a CST would be required. He did not direct the IMD Supervisor to begin executing the two surveillances, which take 10 to 12 hours to perform. The US failed to follow the prerequisites of DGP 02-01 to be completed prior to reaching a point in the power descension when IRMs/SRMs are required for monitoring reactor power. No adverse environmental affects occurred which could contribute to the event.

A contributing cause was that the NSOs [NRC Licensed Reactor Operator] and the US [NRC Licensed Senior Reactor Operator] on the afternoon shift of 6/20/96, when the IRMs/SRMs were required, did not question if the surveillances had been completed prior to lowering power below the APRM range. Although this is not a procedural requirement, it is considered a good operating practice and an expectation of Licensed Individuals, to ensure the IRMs are calibrated prior to reaching their range for monitoring power.

Another contributing cause was that DGP 02-01 (and DGP 02-02) procedures were found to be deficient in the step that requires the IRM/SRM surveillances to be performed were not specific and/or active enough to affirmatively direct the US to tell the IMD Supervisor exactly what is required.

Previous revisions of the shutdown procedure (DGP 02-01 and DGP 02-02) required the verification that IRM setpoints had been calibrated by IMD within the past 7 days, in accordance with DIS 0700-04. On 01/24/96, the procedure had undergone a major revision to remove any references to Soft Shutdown, in addition to implementing the ability for the Operating Team to scram the reactor from low power. Historically, Dresden had always performed the insertion of all operable control rods to complete reactor shutdowns. Justification for the removal of the requirement to verify completion of the IRM setpoint calibration was because the prerequisites already required this verification to be performed. This procedure change was shortsighted in that shutdowns of longer than normal duration could result in Operations entering the mode change, requiring the IRMs to be operable, after expiration of the 7 day surveillance clock. Lastly, the removal of this procedure step eliminated a barrier to prevent the event.

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Barrier analysis identified that only Operations personnel had the training to prevent the event, either through procedural cues from the shutdown procedure or a questioning attitude about why no IMD personnel were in the Control Room performing testing. For this event, the focus on error free operation during the unit shutdown resulted in Operations personnel monitoring system performance instead of questioning equipment operability. Creating a non-Operations barrier by providing the appropriate training on Tech Spec surveillance requirements could have prevented the event.

D. SAFETY ANALYSIS:

Prior to this event, the most recent SRM and IRM calibrations had been performed on 6/5/96 (fifteen days prior to initiation of the reactor shutdown). Review of the surveillance documentation found that all neutron instrumentation was within tolerance, showing no indication of setpoint drifting. Although the surveillance interval had been exceeded, there is reasonable confidence that the instruments were still within calibration tolerance and would have functioned properly during an event. The IRM/APRM Overlap surveillance, DOP 0700-02, "Intermediate Range Monitor (IRM) Operation, was performed successfully during the power descension. For this reason, the safety significance of this event is considered minimal.

E. CORRECTIVE ACTIONS:

The Saift Manager and Operations Manager were contacted immediately upon discovery of the missed surveillance.

The expectation and importance of clear, precise and accurate communications when giving direction to perform tasks involving the support from other departments, and following up on given directions to ensure proper performance and completion of tasks has been reinforced to all management levels involved (Unit Supervisors, IMD Supervision and Shift Managers) by the Operations Manager. They now understand their mistake and agree with the root cause.

The failure of the NSOs to question the operability of the SRMs/IRMs prior to performance of the reactor mode change was considered a personnel performance issue. Operations Management will counsel the involved NSOs on the importance of questioning equipment operability prior to reactor mode changes. (2491809600701)

Operations revised DGP 02-01, "Unit 2(3) Normal Unit Shutdown" and DGP 02-02, "Unit 2(3) Normal Unit Shutdown and Vessel Slow Fill" to provide more specific and/or active guidance to facilitate affirmative direction by the US to the IMD Supervisor to perform the required surveillances. Also, a step has been added to the body of the procedures to provide a verification that DIS 0700-03 and DIS 0700-04 have been completed prior to leaving the APRM range and entering the IRM range. Long Term Corrective Action will involve a procedural change to implement a checklist of items to verify prior to changing operational modes, from "Run" to "Startup". (2491809600702)

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Operations will include the event in a Lessons Learned lecture, to be performed with all Licensed Operators during Operations Continuing Training. (2491809600703)

IMD will determine how to increase the knowledge level of their IMD Supervisors and Technicians, specifically in the area of ECCS and Post Accident Monitoring Technical Specification surveillance requirements. (2491809600704)

F. PREVIOUS OCCURRENCES:

There have been other events involving missed surveillances, but none similar in character or cause to this event.

G. COMPONENT FAILURE DATA:

None.

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