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Dresden Generating Station
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April 20, 1998

JMHLTR: #98-0108

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

Subject: Dresden Nuclear Power Station Units 2 and 3
Reply to a Notice of Violation, Inspection Report 50-237/249/98003
NRC Docket Numbers 50-237 and 50-249

Reference: (a) G. E. Grant letter to O. D. Kingsley, dated March 21, 1998,
transmitting NRC Inspection Report 50-237/249/98003 and Notice of
Violation

The purpose of this letter is to provide ComEd's reply to the violation denoted in the Notice of Violation transmitted by reference (a). The violation was for inadequate or inappropriate procedures in the maintenance area. The response to this item is found in the attachment.

Reference (a) requested that the overall issue of preparing high quality work instructions be addressed. Maintenance Planning searched the PIF (Performance Identification Form) database to identify problem areas within the maintenance planning process from January 1997 through January 1998. The two most significant areas of concern were parts identification and evaluations and package close out. On March 30, 1998, Maintenance Planning implemented new procedures addressing the maintenance planning process and specifically, work package preparation. NSP-WC-3005, "Maintenance Planning Process" and NSWP-WM-10, "Package Preparation," have been implemented to address these areas and subsequently improve package quality. Another new procedure, NSP-WC-3100, "Specify and Design," will facilitate the identification and procuring of parts, and DAP 15-14, "Execution and Close Out," will facilitate the post work review requirements for package closure. The development and implementation of the maintenance planning process was modeled after the scheduling process which has proved to be very successful.

On April 1, 1998, a meeting was held at Dresden Station to discuss the subject of procedure adherence and work package quality with Mr. Mark Ring and Mr. Ronald Gardner, NRC Region III. Our plans to upgrade the work planning process and improve the procedure quality were discussed.

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In addition to the actions taken in the Maintenance and Work Planning Departments the Operations Department will perform a collegial review of Operating Procedures associated with the following systems: Shutdown Cooling (SDC), Reactor Building Closed Cooling Water (RBCCW), Emergency Diesel Generator (EDG), and Feedwater (FW). The review will be undertaken by members of the Operations, Engineering, and Training Departments to assure the technical accuracy of these procedures. This is tracked by NTS 237-100-98-0030102 and is scheduled for completion on July 30, 1998.

Dresden is committing to the following specific actions in the attachments:

A scope and review process was implemented for removing PM activities and surveillance procedures from D2R15 refueling outage to performance on-line. (NTS 237-225-98-03901, due 06/30/98)

Establish a file system for walkdown checklists. NTS-237-200-98-00103 is scheduled for completion by 6/30/98.

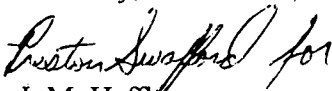
Evaluate the benefits of using a sign off in work packages for like-for-like replacement parts. NTS-237-200-98-00104 is scheduled to be completed by 7/31/98.

Revise DMS 6600-02, "Diesel Generator Mechanical Inspection and Preventive Maintenance," to include a rotation check for motors. NTS 237-200-98-00101 is scheduled for completion by 6/12/98.

The Shift Operations Supervisor will reiterate to the Operating Teams the expectations and ownership of equipment returned to service. NTS 237-100-98-0030103 is scheduled for completion June 1, 1998.

This response contains no proprietary or safeguards information. If there are any questions concerning this letter, please refer them to Mr. Frank Spangenberg, Dresden Station Regulatory Assurance Manager, at (815) 942-2920 extension 3800.

Sincerely,



J. M. Heffley
Site Vice President
Dresden Station

Attachment

cc: A. Bill Beach, Regional Administrator, Region III
M. Ring, Branch Chief, Division of Reactor Projects, Region III
L. Rossbach, Project Manager, NRR (Unit 2/3)
K. Riemer, Senior Resident Inspector, Dresden
Office of Nuclear Facility Safety - IDNS

ATTACHMENT
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/98003(DRP), 50-249/98003(DRP)
98003-01a

VIOLATION:

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR part 50 required that activities affecting quality be prescribed by instructions appropriate to the circumstances and be accomplished in accordance with those instructions. As specified in 10 CFR 50.65(a)(1), safety-related and nonsafety-related structures, systems, or components that are relied upon to remain functional during and following design basis events.

Contrary to the above, on January 13, 1998, Dresden Instrument Surveillance Procedure 0263-14 for Yarway level indicator calibration, an activity affecting quality, was not appropriate for the circumstances of performing the calibration at power because the procedure did not bypass the trip functions. As a consequence of the inadequate surveillance procedure, an automatic reactor scram occurred on January 13, 1998, during the performance of the calibration surveillance.

REASON FOR VIOLATION:

The root cause of the Unit 2 reactor scram was found to be inadequate design review during the modification for the Yarway level switch replacement. Modification M12-2-94-002, completed on March 20, 1996, replaced Yarway level switches with the existing Rosemount transmitters, but left the local Yarway indicators LI 2-263-59A & 59B located on racks 2202-5 & 6 due to Safe Shutdown Analysis requirements. The impact of the modification on plant maintenance activities was not identified. The prompt report identified that there was an inappropriate procedure review. The investigation of the event revealed the design team did not consider the characteristic differences between the Yarway and Rosemount transmitters.

IMMEDIATE CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

A prompt investigation was reviewed by Operations shift personnel. (Complete) An administrative hold was placed on all activities which have been removed from D2R15 outage and re-scheduled as on-line maintenance. (Complete) Corrective actions included revising DIS 263-14, "Local Reactor Water Level Indication (Safe Shutdown) Yarways LI 2(3)-263-59A and LI 2(3)-263-59B Calibration," to be performed off-line only. In addition, the necessity of thorough design reviews, detail industry event database searches,

and the need for detailed questioning of maintenance and operations personnel during design scope meetings was emphasized for design engineers. (Complete)

There have been no previous occurrences of this type of event.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

The following actions were taken:

1. DIS 0263-14 has been revised to be performed as an off-line activity. (Complete)
2. DIS 0263-14 was revised to ensure that the reactor vessel is flooded up prior to performing the calibration procedure. (Complete)
3. IMD performed Just-In-Time training to address conservative decision making and the importance of stopping to question risks considered excessive. (Complete)
4. A multi-discipline team consisting of Maintenance, Operations and Engineering was formed to review all activities to be removed from D2R15 refueling outage and rescheduled as on-line maintenance. (Complete)
5. A preliminary review was conducted to identify items removed from the D3R15 outage. (Complete)
6. A scope and review process will be implemented for removing PM activities and surveillance procedures from refueling outages to performance on-line. (NTS 237-225-98-03901, due 06/30/98)
7. Dresden Administrative Procedure (DAP) 21-03, "Processing Plant Design Changes," has been revised, since this modification, to include instructions for all involved design team members (Operations, Engineering, Maintenance etc.) to identify the impact of the design on their respective departments and procedures. (Complete)
8. The Design Engineering Manager has discussed this event with all design team engineers reminding them to follow DAP 21-03 to ensure thorough design reviews are conducted. In addition, emphasis was placed on the review of industry events and the need to thoroughly question maintenance and operations personnel during design scope meetings. (Complete)

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved for this violation.

ATTACHMENT
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/98003(DRP), 50-249/98003(DRP)
98003-01b

VIOLATION:

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR part 50 required that activities affecting quality be prescribed by instructions appropriate to the circumstances and be accomplished in accordance with those instructions. As specified in 10 CFR 50.65(a)(1), safety-related and nonsafety-related structures, systems, or components that are relied upon to remain functional during and following design basis events.

Contrary to the above, the instructions (WR#970070793) used on February 4, 1998, to perform maintenance, an activity affecting quality, on safety related motor control center (MCC) 28-1 were not appropriate because the instructions specified the installation of an incorrect coil for the 2/3 emergency diesel generator fan.

REASON FOR VIOLATION:

The prompt report identified poor work practices by the responsible individual who identified and ordered the incorrect part. The investigation of the event revealed that the responsible individual who identified the incorrect coil for MCC 28-1 failed to use a station approved procedure for identifying and procuring the correct coil.

IMMEDIATE CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

Corrective actions included a post job critique with a Root Cause Report 237-200-98-00100 issued to determine long term corrective actions. Individual performance issues were identified and handled in accordance with the department Management Action Response Checklist (MARC) manual. Package issues were corrected immediately to allow work to continue without delay. The correct coil was identified and installed.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

Corrective actions were addressed by Root Cause Report 237-200-98-00100. The following corrective actions were approved for this report:

1. Establish a file system for walkdown checklists. NTS-237-200-98-00103 is scheduled for completion by 6/30/98.
2. Evaluate the benefits of using a sign off in work packages for like-for-like replacement parts. NTS 237-200-98-00104 is scheduled to be completed by 7/31/98.
3. Corrective actions included administering personal performance discipline to responsible individuals.
4. In addition, on March 30, 1998, Maintenance Planning implemented new procedures addressing the maintenance planning process and specifically, work package preparation. NSP-WC-3005, "Maintenance Planning Process" and NSWP-WM-10, "Package Preparation," have been implemented to address these areas and subsequently improve package quality. Another new procedure, NSP-WC-3100, "Specify and Design," will facilitate the identification and procuring of parts, and DAP 15-14, "Execution and Close Out," will facilitate the post work review requirements for package closure.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved for this violations.

ATTACHMENT
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/98003(DRP), 50-249/98003(DRP)
98003-01c

VIOLATION:

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR part 50 required that activities affecting quality be prescribed by instructions appropriate to the circumstances and be accomplished in accordance with those instructions. As specified in 10 CFR 50.65(a)(1), safety-related and nonsafety-related structures, systems, or components that are relied upon to remain functional during and following design basis events.

Contrary to above, the work instructions (WR#960044491) used on February 5, 1998, for maintenance of the emergency diesel generator, an activity affecting quality, were inadequate because the proper direction for pump rotation was not checked. This led to the turbo lube oil pump for the 2/3 emergency diesel generator being run backward for several hours.

REASON FOR VIOLATION:

The root cause for this event was poor worker practices and an ineffective procedure used to install the turbo lube oil pump for the 2/3 emergency diesel generator. The procedure did not specify a rotation check prior to running the pump for post maintenance testing. The performance of Maintenance and Operations personnel who failed to notice the oil pump running backwards did not meet station expectations.

IMMEDIATE CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

Corrective actions included a post job critique with a Root Cause Report 237-200-98-00100 issued to determine long term corrective actions. Individual performance issues were identified and handled in accordance with the department Management Action Response Checklist (MARC) manual. Package issues were corrected immediately to allow work to continue without delay.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

Corrective actions were addressed by Root Cause Report 237-200-98-00100.

The following corrective actions were approved for this report:

1. Establish a file system for walkdown checklists. NTS-237-200-98-00103 is scheduled for completion by 6/30/98.
2. Evaluate the benefits of using a sign off in work packages for like-for-like replacement parts. NTS 237-200-98-00104 is scheduled to be completed by 7/31/98.
3. Revise DMS 6600-02, "Diesel Generator Mechanical Inspection and Preventive Maintenance," to include a rotation check for motors. NTS 237-200-98-00101 is scheduled for completion by 6/12/98.
4. The Shift Operations Supervisor will reiterate to the Operating Teams the expectations and ownership of equipment returned to service. NTS 237-100-98-0030103 is scheduled for completion June 1, 1998.

Corrective actions included administering personal performance discipline to responsible individuals from Maintenance and Operations Departments.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance will be achieved for this violation on June 12, 1998 when DMS 6600-02 is revised.

ATTACHMENT
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/98003(DRP), 50-249/98003(DRP)
98003-01d

VIOLATION:

Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR part 50 required that activities affecting quality be prescribed by instructions appropriate to the circumstances and be accomplished in accordance with those instructions. As specified in 10 CFR 50.65(a)(1), safety-related and nonsafety-related structures, systems, or components that are relied upon to remain functional during and following design basis events.

Contrary to above, the erection of scaffolding, an activity which could affect quality, was not accomplished per Dresden Maintenance Procedure (DMP 0018-08 rev. 03), because on January 12, 1998, scaffolding was discovered in direct contact with containment cooling service water system valve 2-1599-82C, a piece of safety related equipment. Attachment D of DMP 0018-08 contained horizontal and vertical clearance requirements between scaffolding and safety related equipment.

REASON FOR VIOLATION:

The procedure used to install or erect scaffolding is clear in providing proper direction for scaffold erection in the station. This was a personal performance issue for the individuals who failed to adhere to the procedure. Based on the few scaffolding problems which were identified during the outage, the scaffolding program is effective.

IMMEDIATE CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

Corrective actions included immediately correcting the scaffolding by moving it in accordance with DAP 18-08. Individual performance issues associated with the erecting of scaffolding were handled in accordance with the departmental MARC manual.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

Corrective actions included administering personal performance discipline to responsible individuals.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved for the violation.