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ComEd

April 6, 1998

JMHLTR: #98-0083

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 50-237/249/97021
NRC Docket Numbers 50-237 and 50-249

Reference: (a) J.A. Grobe letter to O.W. Kingsley, dated March 6, 1998, transmitting NRC Inspection Report 50-237/249/97021 and Notice of Violation

(b) J.M. Heffley (ComEd) to USNRC letter dated March 13, 1998, Design Basis Initiative Program

(c) J.M. Heffley (ComEd) to USNRC letter dated March 31, 1998, Design Basis Initiative Program

The purpose of this letter is to provide ComEd's reply to the three violations denoted in the Notice of Violation transmitted by reference (a). The first violation was for failure to perform a written safety evaluation following the inadvertent change to the control room ventilation system which deleted the automatic smoke purge capability. The second violation was for failure to update the Fire Protection Report as required by 10 CFR 50.71(e). The third violation was for failure to review and revise the Fire Preplans in accordance with the Dresden Fire Protection Program. The responses to each of these items are found in the attachments.

Included in reference (a) was an Unresolved Item URI 50-237/249-97021-01 (DRS). The team had concerns that the Updated Final Safety Analysis Report (UFSAR) did not accurately characterize the plant's design-basis or the plant's capability to respond to a potential Dresden Lock and Dam failure. During the meeting with NRC representatives at Region III headquarters on March 4, 1998, ComEd identified several discrepancies in Section 9.2.5.3.2 "Dam Failure Coincident with a Loss of Coolant Accident (LOCA)" of Dresden's Updated Final Safety Analysis Report.

Reference (b) identified these discrepancies and concluded that a review of Dresden's design criteria reveals that postulating a dam failure coincident with a LOCA was not part of its original design basis. It also stated that Dresden was preparing a Proposed License Amendment to clarify the licensing basis with respect to dam failure.

Dresden has subsequently concluded that a License Amendment is not necessary and that clarifications to the UFSAR may be made through the provisions of 10 CFR 50.59. Reference (c) provided the basis for this conclusion.

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
50-237/97021, 50-249/97021
9702102

VIOLATION:

10CFR 50.59 permits the licensee, in part, to make changes to the facility, and procedures, as described in the safety analysis report, without prior Commission approval, provided the changes do not involve an unreviewed safety question (USQ). Records of these changes must include a written safety evaluation which provides the bases for the determination that the changes do not involve an USQ.

Prior to March 22, 1996, the Dresden Updated Final Safety Analysis Report, Sections 6.4.2 and 6.4.4.3, in part, stated that for fire and smoke protection, the control room heating, ventilation, and air conditioning (HVAC) system was designed to isolate and maintain the design conditions within the control room during fires. The control room Train A HVAC system was capable of both automatic and manual transfer from the normal operating mode to the smoke purge mode. Automatic transfer to the smoke purge mode was initiated by smoke detectors, located in the control room return air ducts.

Contrary to the above, in November 1994, the licensee identified that a prior inadvertent change to the Dresden Station's control room ventilation system design deleted the automatic smoke purge mode transfer capability. From November 1994 to March 1996, the licensee failed to perform a written safety evaluation to provide the bases for the determination that the change did not involve an USQ.
(VIO 50-237/249-97021-02(DRS))

This is a Severity Level IV violation (Supplement 1).

REASON FOR VIOLATION:

Personnel conducting the surveillance testing of Control Room Ventilation System Smoke Detectors did not perform an operability evaluation of the system when the automatic feature of the smoke purge mode failed in November 1994. Had this been done, a safety evaluation of the system without automatic smoke purge would have been conducted. The personnel performing the test believed there to be a problem with the field installation and continued their efforts to find the problem. In March of 1996, they determined that there was an error in the design which prevented operation of the automatic purge mode and performed the safety evaluation at that time. Additional details are provided below:

Upon completion of surveillance testing of smoke detectors, Special Procedure (SP) 94-100, on November 14, 1994, some unexpected test results were encountered. Work

Request (WR) 940099080 and Problem Identification Form (PIF) 237-201-94-MM72300 were generated to document that ventilation dampers 2/3-9472-023 and 24 would not operate and to repair them. Engineering determined that the field installation of the detectors did not meet design wiring diagrams. Engineering Requests (ERs) 9501913 and 9502320 were initiated to resolve the installed configuration with the design. On May 20, 1995, the Control room habitability concerns were addressed by Engineering and the manual purge mode was allowed for emergency use to clear smoke and fumes from the Control Room. This was a temporary fix until the ERs were addressed. The result of the ERs was a modification package to resolve identified deficiencies with smoke detectors in March 1996. During the modification process a 10 CFR 50.59 Safety Evaluation was performed covering the modification of the smoke detector installations. Surveillance activities were delayed when smoke detector design and installation deficiencies were identified. The installation was determined to be in accordance with the design, but the design did not function in the automatic smoke purge mode. Once this was identified, a modification package was generated to correct the deficiencies.

From November 1994 to March 1996, the personnel working with the Smoke Purge Mode Installation did not question the design and did not perform a 10 CFR 50.59 safety evaluation for an USQ. A safety evaluation was performed on Smoke Purge Mode design function prior to installation.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

When the design deficiencies were identified in March 1996, a 10 CFR 50.59 safety evaluation was performed by Design Engineering. This safety evaluation determined that the removal of the automatic smoke purge capability of the control room HVAC was not an USQ. Branch Technical Position APCSB 9.5.1, "Fire Protection Requirements," requires only manual purge operation, which was maintained. However, Dresden ~~will~~ re-installed the automatic purge function in accordance with current industry practices.

In a parallel effort, a UFSAR change to remove the automatic smoke purge function was initiated and a modification package was initiated to resolve the deficiencies. The UFSAR change was completed while the field installation for the modification package was being implemented in the field.

The field installation of the modification was delayed from January 1997 through August 1997 because dampers 2/3-9472-023 and 024 were damaged. The dampers were installed in August 1997 and the smoke detector surveillance was satisfactorily completed. The automatic smoke purge mode was found acceptable on August 21, 1997.

NTS item # 2372609754301A, planned for completion by July 1, 1998, was initiated to change the UFSAR to reflect that the Control Room HVAC System has both automatic and manual initiation of the smoke purge mode.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

Active involvement of the System Manager and Engineering is required to ensure the plant design basis is maintained and equipment operates in accordance with designed functions. To ensure these elements:

1. Engineering Support Personnel Training has been implemented to develop a questioning attitude among Engineering personnel. If equipment does not respond or operate in accordance with the design, actions should be implemented to document, troubleshoot, and resolve the problems. Documentation that should be generated are PIFs, ERs, and as applicable, safety evaluations, and operability determinations as defined in Corporate and Dresden procedures.

2. The Plant Engineering Handbook has been developed to define responsibilities of the System Manager including definition and resolution of design and operability concerns. In part, the handbook requires that Plant Engineering be aware of design basis and applicable license requirements and helps ensure that maintenance, operations, and testing activities are conducted in accordance with these requirements.

The above actions have been implemented to prevent reoccurrence through personnel training, engineering guidance, and procedures to control activities more rigorously. The current administrative programs and procedures have been continuously assessed and revised over the time span covered by these deficiencies and have matured to be more comprehensive.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance will be obtained when the UFSAR is changed to incorporate the automatic smoke purge function in the UFSAR is completed on July 1, 1998.

ATTACHMENT
RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/97021, 50-249/97021
97021-03

VIOLATION:

10 CFR 50.71(e) states, in part, that the licensee shall submit revisions containing information to the Final Safety Analysis Report (UFSAR) to the NRC annually or six months after each refueling outage provided the interval between successive updates does not exceed 24 months.

Contrary to the above, from November 1994 through November 21, 1997, the Fire Protection Report, referenced as part of the UFSAR, had not been updated and the revision updates submitted to the NRC.

This is a Security Level IV violation (Supplement 1).

REASON FOR VIOLATION:

Prior to December 1997 Dresden did not clearly understand that the Fire Protection Report (FPR) was part of the UFSAR and subject to the requirements in 10 CFR 50.71(e) for updating the UFSAR. In December 1997, ComEd Corporate personnel reviewed Dresden's License Amendments 106 and 101 for Dresden Units 2 and 3, respectively, and the NRC's Safety Evaluation Report for those amendments. It was concluded that the Dresden Fire Protection Report is part of the UFSAR with regard to the periodic report of changes required by 10 CFR 50.71(e).

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

Dresden has identified and understands the requirements for updating the FPR and reporting those changes to the NRC. In accordance with NRC Generic Letter 86-10, all changes to the approved Fire Protection Program shall be reported along with the UFSAR revisions required by 10 CFR 50.71(e). The current revision policy for the Dresden UFSAR is to submit the revision to the UFSAR to the NRC no later than 24 months from the date of the previous revision submittal.

Dresden is working on the 1996 FPR update, which is scheduled for completion and submittal to the NRC by August 30, 1998. This activity is being tracked by NTS Item No. 237-315-96-15101.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

ComEd will develop a procedure to control the updating of the Fire Protection Report. This procedure will reflect the updating and reporting requirements identified above. This work is being tracked by NTS Item No. 237-225-97-R12-97242.

The 1998 FPR Update is presently scheduled for completion to coincide with Dresden's present 24 month schedule for submitting UFSAR updates to the NRC. This work is being tracked by NTS Item No. 237-100-97-210302.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance will be achieved with the UFSAR submittal in the second quarter of 1999.

RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-237/97021, 50-249/97021
97021-04

VIOLATION:

Technical Specification 6.2.A states, in part, that written procedures shall be established and implemented covering the activities referenced in Regulatory Guide (RG) 1.33, Revision 2, Appendix A, dated February 1978. The activities listed in RG 1.33 included procedure review and the approval process.

Dresden Fire Protection Program Procedure (DFPP) 4100-01, "Fire Protection Program," Revision 1, Section G.2.a.(7) required that fire pre-plans be reviewed on an annual basis, and revised as appropriate.

Contrary to the above, as of November 21, 1997, the fire pre-plans had not been reviewed or revised since September 1992. (VIO 50-237/249-97021-04(DRS))

This is a Security Level IV violation (Supplement 1).

REASON FOR VIOLATION:

Previous reviews of the Dresden fire pre-plans were not adequately documented. When Dresden formed the Safety and Property Loss Prevention Group, the review of the fire pre-plans was not added as an annual surveillance (predefine). Consequently there was no mechanism to assure the review would be completed and documented.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

When it was determined that the fire pre-plans had not been updated, a Problem Identification Form (PIF) was generated. An apparent cause evaluation was performed identifying the need for a predefine to track the review of the fire pre-plans and the documentation to show the review was completed.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

An Action Request was initiated to create the predefine for future reviews and revisions to the fire pre-plans. (completed)

Current fire pre-plans are in the process of being updated. This update will be completed by May 15, 1998. (NTS #237-315-98-00501A)

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance will be achieved with the completion of the fire pre-plan review and documented results on May 15, 1998.