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Subject: Response to NRC Inspection Report Number 50-346/96005


Ladies and Gentlemen:

Toledo Edison has received Inspection Report 96005 (Log Number 1-3765) and the enclosed Notices of Violation. The Responses to the Notices of Violation are attached.

The violations involve an event on April 16, 1996, regarding a lift of the reactor vessel head lifting tripod over the open reactor vessel and the failure to perform a safety evaluation for a change to the plant as described in the Updated Safety Analysis Report made on December 15, 1995.

Should you have any questions or require additional information, please contact Mr. James L. Freels, Manager - Regulatory Affairs, at (419) 321-8466.

Very truly yours,



GMW/dlc

cc: A. B. Beach, Regional Administrator, NRC Region III
A. G. Hansen, NRC Project Manager
S. Stasek, DB-1 NRC Senior Resident Inspector
Utility Radiological Safety Board

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Reply to a Notice of Violation (50-346/96005-04[DRP])

Alleged Violation A.

10 CFR 50, Appendix B, Criterion V, states, in part, that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Plant Procedure DB-MM-06002, Revision 01, "Polar Crane Operation," step 2.2.30 stated that "During the period when the reactor vessel head is removed and irradiated fuel is in the containment vessel and fuel is not being moved, the polar crane hoists shall be operated over the refueling canal only when necessary and in accordance with approved operating procedures stating the purpose of such use."

Step 2.2.34 of DB-MM-06002 stated, in part, that "Equipment is to be moved within the load path area (Attachment 3)." Attachment 3 specified a load path layout diagram of containment that excluded the immediate area around the reactor vessel.

Step 2.2.36 of DB-MM-06002 stated, in part, that "The following heavy loads are lifted using the polar crane. . ." The specified heavy loads list included the reactor vessel head lifting rig. Contrary to the above, the polar crane was used to lift the reactor vessel head lifting rig over the open reactor vessel on April 16, 1996. (50-346/96005-04[DRP])

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

Reason For The Violation

The cause of this violation was a failure to follow plant procedures. Prior to the event, the reactor vessel head lifting tripod had been used to remove the reactor vessel head, and was still rigged to the polar crane main hook. The tripod was positioned over the west secondary shield wall and was closest to the containment wall with the auxiliary hook on the inside toward the center of containment. A deviation from the preferred outage sequence resulted in the incore tank floor plugs not being removed prior to removing the reactor vessel head. The incore tank floor plugs can be removed by either the auxiliary or the main hook, provided the hook selected is closest to the containment wall.

When the options available to position the polar crane over the incore tank floor plugs were considered, several misconceptions were developed instead of consulting with procedures or further consulting with Outage Management. The tripod was incorrectly perceived as rigging rather than a heavy load. The procedure also contains an attachment that specifies acceptable heavy load path options.

The crane operator was aware of the heavy load restrictions of the polar crane operating procedure (DB-MM-06002). The crane operator was willing to move the tripod over the reactor vessel as long as the Shift Supervisor granted permission and communication with the Shift Supervisor was established while the tripod traversed the reactor vessel. Although other personnel involved in the decision knew the procedure contained these load path restrictions, they did not fully comprehend the context of these restrictions.

Corrective Steps That Have Been Taken And The Results Achieved

On April 16, 1996, Potential Condition Adverse to Quality Report (PCAQR) 96-0502 was initiated to document the event.

Immediate corrective action was to provide direction (Memorandum DSP-96-00029) from the Plant Manager to the Outage Directors on April 23, 1996, to re-emphasize acceptable load paths inside containment. The commitment made to the NRC by Toledo Edison in response to NUREG-0612 relative to safe load paths allowed exception to these load paths only upon approval of the Plant Manager. For the tenth refueling outage, the memorandum delegated this authority to the Outage Directors. The Polar Crane Operating Procedure, DB-MM-06002, was altered on May 10, 1996, to reflect this approval requirement.

A training lesson plan (MMS-CQT-I001) was prepared and presented to outage management personnel and crane operators by May 2, 1996. The lesson reviewed the definition of a heavy load and specific load path restrictions for the polar crane. The lesson plan reinforced that the reactor vessel head lifting tripod is a heavy load. This lesson plan has been incorporated into the required training for all on-site crane operators.

Licensee Event Report (LER) 96-005 was issued May 23, 1996, documenting this event in accordance with 10CFR50.73(a)(2)(ii)(B) as a condition outside the design basis. Revision 1 to this LER was issued on August 16, 1996, finalizing the results of the event analysis.

Corrective Steps That Will Be Taken To Avoid Further Violations

In addition to the corrective actions taken above to prevent recurrence, commitments and procedures for handling heavy loads with the polar crane will be reassessed prior to the next refueling outage to determine any possible enhancements. Identified procedural enhancements as determined necessary will be completed prior to the next refueling outage.

Date When Full Compliance Will Be Achieved

As this was an isolated event, the DBNPS was in full compliance with 10CFR50, Appendix B, Criterion V requirements other than the time period when the reactor vessel head lifting tripod was over the open reactor vessel.

Reply to a Notice of Violation (50-346/96J05-08[DRP])

Alleged Violation B.

10 CFR Part 50.59, states, in part, that "The holder of a license authorizing operation of a production or utilization facility may (i) make changes in the facility as described in the safety analysis report. . . without prior Commission approval, unless the proposed change, test or experiment involves a change in the technical specifications incorporated in the license or an unreviewed safety question."

10 CFR Part 50.59 further states that "The licensee shall maintain records of changes in the facility and of changes in procedures made pursuant to this section, to the extent that these changes constitute changes in the facility as described in the safety analysis report or to the extent that they constitute changes in procedures as described in the safety analysis report. . . . These records must include a written safety evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed safety question."

Contrary to the above, on December 15, 1995, the licensee made a change to the plant as described in the safety analysis report without performing a safety evaluation. The Primary Water Storage Tank, a tank described in the Updated Safety Analysis Report as providing primary and backup water sources to the plant, was drained and made unavailable for station use. This was done without a safety evaluation having been performed to determine whether the change constituted a change to technical specifications or whether there was an unreviewed safety question. (50-346/96005-08[DRP])

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

Reason For The Violation

The cause of this violation was poor judgment in the implementation of site processes by the individuals involved. The safety evaluation for abandoning the Primary Water Storage Tank (PWST) was started in October 1995, but due to other higher priority work, the safety evaluation was not completed in the desired time frame.

A Maintenance Work Order (MWO) was generated on October 13, 1995, to address problems with the freeze protection for the PWST. Several options were developed to address concerns with the tank freezing. Draining the tank under the MWO while waiting for the abandonment modification to be completed was determined to be the most cost effective. Other alternatives would have included establishing a higher priority on the Safety Evaluation, repair of the freeze protection, or installation of temporary freeze protection, until the Safety Evaluation was completed.

It was considered sufficient to permit draining of the tank under the MWO because it would provide for proper tag-out, removal from service, and restoration, if needed. It was recognized that a Safety Evaluation was needed to abandon the tank. However, it was believed that the tank could be drained under the Safety Tagging procedure (DB-OP-00015), since this procedure does

not require a Safety Evaluation be performed for maintenance activities until the equipment has been out of service for an extended period of time (currently defined as six months). Therefore, draining of the tank began on December 15, 1995, without the Safety Evaluation being completed. Those individuals involved exercised poor judgment in proceeding with draining the PWST despite the lack of clear procedural guidance permitting this solution without a Safety Evaluation in place. The MWO to repair the freeze protection was not released for work.

Based on a review of applicable procedures (DB-DP-00007, Control of Work; DB-MN-00001, Conduct of Maintenance; NG-EN-00301, Plant Modifications; and EN-DP-01200, Processing Plant Modifications), this course of action was not within procedural guidelines.

Corrective Steps That Have Been Taken And The Results Achieved

Safety Evaluation 96-0003 was approved on January 27, 1996. This documented that the abandonment of the PWST did not constitute a change to the technical specifications and did not represent an unreviewed safety question in accordance with 10 CFR 50.59.

The Operations department, including the Work Order Control Unit, has received training to ensure that expectations are clear concerning this event and future issues. This training was completed by August 30, 1996.

Corrective Steps That Will Be Taken To Avoid Further Violations

In addition to the corrective actions taken above to prevent recurrence:

- This event and the lessons learned will be discussed with the site managers at the periodically held Managers' Meetings. Site managers will present the lessons learned to their respective sections. These actions will be complete by March 31, 1997.
- All engineering support personnel will participate in training that addresses the requirements for abandonment of equipment and to reinforce management expectations to maintain the plant in compliance with the Updated Safety Analysis Report. This training will be complete by March 31, 1997.
- The guidance for performing a safety review and subsequent safety evaluation when removing equipment from service under the Safety Tagging procedure or the Removal and Restoration of Station Equipment procedure (DB-OP-00016) will be evaluated. This evaluation will be completed by January 31, 1997, and the necessary procedure changes will be completed by March 31, 1997.

Date When Full Compliance Will Be Achieved

Full compliance with 10CFR Part 50.59 requirements was achieved January 27, 1996, when the safety evaluation for abandoning the Primary Water Storage Tank (96-0003) was approved.