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SVP-99-096

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U. S. Nuclear Regulatory Commission
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Quad Cities Nuclear Power Station, Unit 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Supplemental Reply to Notice of Violation 50-254/98023-01 Concerning the Out-of-Service Program

References:
(1) Letter from S. A. Reynolds (USNRC) to O. D Kingsley (ComEd), dated February 17, 1999, "Notice of Violation and Quad Cities Inspection Report 50-254/98023(DRP); 50-265/98023(DRP)"

(2) Letter from J. P. Dimmette, Jr.(ComEd), SVP 99-055 to USNRC, dated March 19, 1999, "Response to Notice of Violation 50-254/98023-01 Concerning the Out-of-Service Program"

(3) Letter from S. A. Reynolds (USNRC) to O. D. Kingsley (ComEd), dated April 1, 1999, "Quad Cities Inspection Report 50-254/99001(DRP); 50-265/99001(DRP)"

Enclosed is a supplement to the Commonwealth Edison (ComEd) Company reply to Notice of Violation (NOV) 50-254/98023-01 issued to Quad Cities Nuclear Power Station and transmitted in Reference (1). The reply to the specific violation was included in Reference (2).

As discussed in Reference (3), ComEd is supplementing the reply to NOV 50-254/98023-01 to discuss a February 18, 1999, Out-of-Service (OOS) error. This supplement discusses the reason for the OOS error and commits to further corrective actions from that event. This reply also provides a status of previous commitments and describes new initiatives to improve performance with regard to the OOS process and human performance in general.

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ComEd is committing to the following additional actions in response to the February 18, 1999, OOS error:

- The expectation for operating components from standard locations will be included in QAP 0300-02, "Conduct of Shift Operations," by June 11, 1999. A Daily Order Book entry has communicated to Operations personnel the expectation to operate components from the standard location whenever possible. If circumstances prevent operating a component from the standard location, the standard location must be checked to verify that operation of the component is not prohibited.

- QCAP 2200-03, "Planning, Scheduling Operating Cycle Work," will be revised by June 11, 1999, to ensure that appropriate reviews are documented for priority A and B1 schedule additions to verify that plant conditions support the activity. The expectation has been reinforced with the Operations planning group that their review of the daily schedule (including work additions) ensures the plant lineup is correct for the performance of each scheduled task.

Any other actions described in the submittal represent intended or planned actions by ComEd. They are described for information and are not regulatory commitments.

Should you have any questions concerning this letter, please contact Mr. Wally Beck, Acting Regulatory Assurance Manager, at (309) 654-2241, extension 3100.

Respectfully,

Joel P. Dimmette, Jr.
Site Vice President
Quad Cities Nuclear Power Station

Attachment: Supplemental Response to NOV 50-254/98023-01

cc: Regional Administrator -- NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

In Reference (3) the NRC noted that, if necessary, our response to NOV 50-254/98023-01 should be modified to include corrective actions sufficient to address the Out-of-Service (OOS) tagging errors identified in Reference (3).

On February 18, 1999, during the performance of a logic test surveillance Operations personnel operated a breaker that was OOS to protect equipment. The test procedure had recently been revised and had been added to the schedule without recognizing that the revised test would require manipulation of a component that was OOS. During the performance of the surveillance, the critical task coordinator and an electrician correctly identified the breaker cubicle for 2-1001-47, RHR Shutdown Cooling Outboard Suction Isolation Valve, but did not notice an OOS card hanging from the breaker handle. The electrician opened the cubicle door, obscuring the OOS card and proceeded to install jumpers as directed by the surveillance. After the jumpers were installed, an operator was dispatched to assist and was requested to close the breaker per the surveillance. The operator verified that he was on the correct component by checking the label on the cubicle door; however, the jumpers that had just been installed prevented the door from fully closing and the OOS card on the breaker handle remained obscured. The operator then operated the breaker from inside the cubicle. After the breaker was operated, the critical task coordinator saw the OOS card and directed the operator to reopen the breaker. The root causes of this event were inattention to detail, inadequate precautions established for operating components from non-standard locations (inside the cubicle), and inadequate review of the schedule to determine that the OOS needed to be cleared to perform the test.

In the response to NOV 50-254/98023-01, ComEd discussed that previous corrective actions to correct OOS problems had not been fully effective. Previous corrective actions for OOS problems were focused on individual events and departments and did not fully take into account the broader issues of human performance. Human performance problems were due to a lack of adequate management oversight and reinforcement of the standards and expectations at the lowest level in the organization.

Two new initiatives will supplement the plans previously discussed in the March 19,1999, letter to improve human performance at Quad Cities. One initiative is the establishment of a multidiscipline Human Performance High Impact Team whose chartered purpose is to prevent human error through education, behavioral changes, and program and process improvements. This team includes individuals at various levels from various departments throughout the station, who will work to identify and understand human performance issues and solutions and will facilitate change throughout the station to improve human performance. On April 6, 1999, the BWR Vice President and Quad Cities Site Vice President approved the Human Performance High Impact Team Charter.

The second initiative is rigorous implementation of the new Nuclear Generating Group (NGG) Self-Assessment Procedure to improve Quad Cities self-criticism and the effectiveness of processes and corrective actions. On April 14, 1999, the Acting Station Manager approved a plan for implementation of the NGG Self-Assessment Procedure. This included the designation of two Self-Assessment Line Managers who will work with Line Manager Department Heads to implement an improved Self-Assessment Program at Quad Cities Nuclear Power Station. The first quarter 1999 Quarterly Self-Assessment, performed in accordance with the new NGG Self-Assessment Procedure, is scheduled to be complete by June 1, 1999. The second quarter 1999 Quarterly Self-Assessment is scheduled to be complete by July 17, 1999.

CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN TO AVOID FURTHER VIOLATION

The following corrective actions were discussed in the March 19, 1999, letter to the NRC and were completed prior to the issuance of that letter.

- On January 29, 1999, a new policy, QCPP 0110, "Event Review Board," was implemented to formalize the Senior Management Review of Human Performance events.

- On February 25-26, 1999, the Quad Cities Station Site Vice President and Station Manager issued letters to all employees reinforcing the need for high standards in procedural adherence and in the conduct of Heightened Level of Awareness briefings. This expectation was rolled out to the management team on March 3, 1999.

- On March 12, 1999, stand-down meetings were conducted by Senior Management throughout the ComEd Nuclear Generation Group. The stand-down meetings addressed the need for improved human performance and stressed the importance of personal accountability. Additionally, individual departments met to reinforce and discuss the standards for prevention of errors. For applicable departments, this included discussion of proper zone of protection for OOS activities.

- On March 17, 1999, INPO representatives presented a four-hour course titled "Human Performance, a Management Perspective." This was conducted at Quad Cities Station and attended by Senior Management and other selected station personnel.

The following corrective actions were discussed in the March 19, 1999, letter to the NRC and completed following the issuance of that letter.

- Prior to March 30, 1999, Items No. 28 and No. 29 of the Station Configuration Control Action Plan were completed concerning refresher training on OOS acceptance and walkdown safety verification checklists for maintenance personnel.

- Prior to April 9, 1999, the Maintenance Manager met with and communicated with the department First Line Supervisors (FLS) to reinforce the following:

  - Adherence to procedures
  - Maintenance control of work
  - Safe work practices
  - Personal Accountability

- Prior to April 10, 1999, the Site Vice President, Station Manager, and Operations Manager held accountability sessions with each Operating Shift Manager and his management crew. The accountability sessions included discussions on adherence to standards, the need for change, and how that change will be sustained to achieve improved operator performance.

- Prior to April 10, 1999, an independent multidiscipline team completed a review of previous corrective actions associated with station PIF's, root cause trend reports, LER's, and responses to NOVs related to OOS problems. The review was performed to ensure adequate implementation of previous corrective actions and compliance to the station's OOS process prior to the Unit 1 planned outage (Q1PO2) beginning April 10, 1999. The team identified that the OOS process was sound but was not properly implemented due to personnel errors.

- On April 24, 1999, Nuclear Oversight (NO) completed an assessment performed during Q1PO2 of preparation of OOS and adherence to the OOS process. The assessors used a combination of direct field observations and paperwork reviews and found the OOS process and the implementation of the OOS process to be acceptable.

The following additional corrective actions were taken in response to the February 18, 1999, OOS error.

- An Event Review Board was conducted for the February 18, 1999, OOS error described above.

- On March 15, 1999, the following expectation was communicated to Operations through a Daily Order Book entry.

  Always operate components from the standard location whenever possible. If circumstances prevent operating a component from the standard location, obtain Unit Supervisor permission prior to the operation and check the standard location to verify that operation of the component is not prohibited (i.e. OOS) or restricted (i.e. Caution Card).

- Prior to April 2, 1999, the following expectation was reinforced with the Operations planning group.

  The Operations planning group reviews the daily schedule (including work additions) to ensure the plant lineup is correct for the performance of each scheduled task. Emphasis will be placed on tasks that are scheduled to be performed in a different plant mode or condition than usually performed, or a new procedure, or a procedure that has been significantly revised and not performed since it was revised.

CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATION

The following corrective actions were discussed in the March 19, 1999, letter to the NRC and committed to in that letter.

- The above mentioned multidiscipline team will perform a self-assessment in accordance with the station's program for self-assessments in May 1999. This review will be conducted to ensure compliance to the station's OOS program is being properly maintained. (Action Tracking No. 0000434903)

- An effectiveness review will be conducted by July 31, 1999, to assess the effectiveness of corrective actions from OOS trend PIF Q1999-00045.
  (Action Tracking No. 0000504901)

- NO will perform a follow up assessment in September, 1999, to assess the station's compliance with the OOS program and effectiveness of the corrective actions. (Action Tracking No. 0000434905)

The following additional corrective actions will be taken in response to the February 18, 1999, OOS error.

- The expectation for operating components from standard locations will be included in QAP 0300-02, Conduct of Shift Operations, by June 11, 1999. (Action Tracking No. 0000551401)

- QCAP 2200-03, Planning, Scheduling Operating Cycle Work, will be revised by June 11, 1999 to ensure that appropriate reviews are documented for priority A and B1 schedule additions and the Operations planning group review expectation stated above is documented in these reviews. (Action Tracking No. 0000551403)