



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4362**

May 16, 2005

MEMORANDUM TO: Luis A. Reyes  
Executive Director for Operations

THRU: James E. Dyer, Director */RA/*  
Office of Nuclear Reactor Regulation

FROM: James L. Caldwell */RA/*  
Regional Administrator

SUBJECT: REACTOR OVERSIGHT PROCESS ACTION MATRIX  
DEVIATION REQUEST FOR DAVIS-BESSE NUCLEAR POWER  
STATION

This memorandum requests your approval to deviate from the Reactor Oversight Process (ROP) actions for the Davis-Besse Nuclear Power Station to continue heightened NRC oversight for the time period of July 2005 through June 2006. This action is necessary to continue to monitor the licensee's efforts to sustain improved plant performance following resolution of the longstanding underlying problems that culminated in a Red finding associated with the severe wastage that was discovered on the reactor vessel head. For Davis-Besse, we have taken actions consistent with the requirements of the IMC 0350 Process. Specifically, on May 9, 2005, the Oversight Panel issued a memo recommending return of the plant to the ROP, which will occur as of July 1, 2005. On the basis of this recommendation, I have consulted with the Director of NRR and the Deputy Executive Director for Reactor Programs and determined that return of Davis-Besse to the ROP is warranted.

The actions we propose in this memorandum are planned for Davis-Besse for the time period of July 2005 through June 2006. These actions would also allow for the discontinuance of the oversight currently being provided by the IMC 0350 Process and return of the facility to the ROP described in IMC 0305. This approach is consistent with the underlying concept of the recent revision to IMC 0305, in which the NRC, through its assessment process, has recognized that longstanding performance issues at a plant may require a more tailored, plant-specific, follow-up over an extended period of time. NRR is in the process of changing IMC 0305 to include additional inspection hours for plants exiting the IMC 0350 process.

#### Background

The Davis-Besse facility entered the IMC 0350 Oversight Process as a result of the issues that led to the wastage of the reactor vessel head, which was discovered during the 2002 refueling outage. Programmatic breakdowns in the areas of Operations, Engineering, Corrective Actions, and Safety Culture/Safety Conscious Work Environment (SCWE), contributed to the eventual wastage discovered on the reactor vessel head.

To address the programmatic issues that resulted in the reactor head degradation prior to restart of the facility, the licensee submitted its "Integrated Report to Support Restart of the Davis-Besse Nuclear Power Station and Request for Restart Approval." This report documented specific corrective actions that were taken and commitments for actions targeting sustained performance improvement at Davis-Besse. Prior to granting restart authority to the licensee, the Agency performed special inspection activities that were sufficiently comprehensive to be in excess of that required by IP 95002 and IP 95003.

The NRC concluded that the licensee had taken sufficient actions to correct the deficiencies that led to the Red finding. To ensure lasting corrective action had been taken to improve the licensee's ability to self-assess and sustain safe performance at Davis-Besse post restart, the NRC determined that a Confirmatory Order was necessary to modify their license and require, in part, annual independent assessments for five years in the areas of Operations, Engineering, Corrective Actions, and Safety Culture/SCWE.

The licensee has completed the March 8, 2004, Confirmatory Order required independent assessments for CY2004 and the Cycle 14 mid-cycle (January through February, 2005) reactor pressure vessel upper/lower head bare metal inspections. The reactor pressure vessel inspections revealed no reactor coolant system pressure boundary leakage. Inspectors also evaluated the results of the independent assessments and determined that they were adequate to meet the requirements of the Order. The results of the independent assessments and NRC inspection activities can be summarized briefly as follows:

- Operations performance has improved;
- Engineering performance showed some improvement but a large backlog of work remains;
- While the independent assessment concluded that the implementation of the Corrective Action program showed marginal improvement in most areas and was rated unsatisfactory in one area (trending), the NRC's assessment concluded that this program was showing improvement, and that the independent assessment had focused on activities performed before implementation of the licensee's improvement initiatives; and
- While the independent assessment concluded that SC/SCWE was stable with declining responses in a few areas, the NRC's assessment concluded that subsequent to the mid-cycle outage, SC/SCWE had shown improved response.

On April 21, 2005, the Agency issued a Notice of Violation, which included the proposed imposition of a substantial Civil Penalty, and documented the final disposition of the apparent violations associated with the Red finding that had been issued to the licensee on May 29, 2003. All inspection activities necessary to review the licensee's corrective actions for the Red finding have been completed. The only remaining open enforcement item associated with the Red finding is the receipt of the licensee's response to the Notice of Violation and proposed imposition of Civil Penalty, and the Agency's disposition of that response.

Deviation Basis

Based on current plant performance and a recent White finding associated with the Emergency Preparedness cornerstone, the licensee will transition from IMC 0350 Process to the ROP under the Regulatory Response column of the Action Matrix, on July 1, 2005. Although the licensee's performance has continued to improve at Davis-Besse, the region believes that Davis-Besse continues to warrant additional NRC assessment.

In the case of Davis-Besse, the March 8, 2004 Confirmatory Order required, in part, that the FirstEnergy Nuclear Operating Company contract with outside organizations to conduct comprehensive assessments of Davis-Besse operations performance, organizational Safety Culture/SCWE, the corrective action program implementation, and the engineering program effectiveness. The NRC required these additional measures to provide reasonable assurance that long term corrective actions remain effective for those conditions that resulted in the risk-significant performance deficiencies which occurred at Davis-Besse. These independent assessments provide important confirmation of the effectiveness of the licensee's self-assessments and long-term improvement actions. Therefore, the region believes that to adequately evaluate the effectiveness of the independent assessments and the licensee's performance in reducing their large corrective action and maintenance backlogs, continued heightened oversight at a level above the Regulatory Response Column is appropriate for Davis-Besse for the time period of July 2005 to June 2006.

Deviation Request

Davis-Besse will move from NRC oversight under the IMC 0350 Process to the Regulatory Response column of the Action Matrix on July 1, 2005. The region requests your approval to deviate from the ROP Action Matrix to provide the following additional oversight of Davis-Besse for the time period of July 2005 to June 2006:

- a. Additional inspection resources for IP 93812, "Special Inspections," specifically for the evaluation of the Confirmatory Order Required independent assessments for CY2005 conducted in the four areas described in the Order. These four areas are Operations, Engineering, Corrective Actions, and Safety Culture/SCWE. Inspection activities associated with the performance of each Independent Assessment would include: a review of each independent assessment plan prior to the start of each assessment; an evaluation of the in-process assessment activities; and a review of each final Independent Assessment Report and the associated action plans to resolve any areas for improvement detailed in the Report. The estimated additional inspection resources required to perform these inspections would be approximately 400 additional inspection hours. Results of the inspections would be documented in the Davis-Besse resident integrated inspection reports.
- b. The performance of an additional Problem Identification and Resolution team inspection (IP 71152) during CY2005. This additional inspection is necessary to monitor the licensee's performance in the areas of self assessment, problem identification, trending, and progress toward effectively reducing their large backlog of maintenance and corrective action items. In addition, the inspection

would focus on follow up to the licensee's commitments and action plans that result from the Independent Assessments required by the Confirmatory Order. This would also include the licensee's self-assessment results compared with the Independent Assessment results in the four areas of Operations, Engineering, Corrective Actions, and Safety Culture/SCWE. The additional inspection resources required to perform this additional inspection would be approximately 200 hours of direct inspection.

IMC 0305, Section 06.05.b.4, recognizes that up to 200 hours of direct inspection may be required for licensees which have been in the multiple/repetitive cornerstone column of the Action Matrix and that this additional inspection time does not constitute a deviation from the Action Matrix. Additionally, section 06.06.j, allows for one additional Problem Identification and Resolution inspection during the two year period following the quarter in which a facility reaches the Degraded Cornerstone Column of the Action Matrix. There are no similar provisions for additional inspection resources outlined in IMC 0305 for facilities which are transitioning out of the IMC 0350 process at this time. However, NRR is in the process of changing IMC 0305 to include additional inspection hours for plants exiting the IMC 0350 process. Region III requests a Reactor Oversight Process Action Matrix Deviation to conduct the additional inspections as described above.

Approval:

/RA/Luis A. Reyes      05/18/2005

cc: B. Borchardt, NRR  
B. Boger, NRR  
C. Carpenter, NRR  
S. Richards, NRR  
R. Pascarelli, NRR  
G. Grant, DRA, RIII  
M. Satorious, DRP, RIII  
C. Pederson, DRS, RIII  
C. Thomas, SRI, RIII

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ADAMS: WYes ☐ No Initials:   wcw    
' Publicly Available W Non-Publicly Available ' Sensitive W Non-Sensitive  
E:\Filenet\ML051390321.wpd

\*See previous concurrence

RIII	RIII	RIII	NRR:DIPM:IIPB  E	RIII
MPhillips/sls	CLipa	SReynolds	JAnderson for SRichards	JCaldwell
5/09/05	5/13/05	5/13/05 & 5/16/05	4/29/05 & 5/16/06	05/16/05

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