

August 17, 2006

MEMORANDUM TO: Luis A. Reyes  
Executive Director for Operations

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

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

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

This memorandum requests your approval to deviate from the Reactor Oversight Process (ROP) Action Matrix for the Davis-Besse Nuclear Power Station in order to continue heightened Nuclear Regulatory Commission (NRC) oversight for the time period of August 2006 through July 2007. This action is necessary to continue to monitor the licensee's efforts to sustain improved plant performance following resolution of the long-standing underlying problems that culminated in a Red finding associated with the severe wastage that was discovered on the reactor vessel head. Davis-Besse was placed under the IMC 0350 process for about 3 years. After the Oversight Panel's recommendation and in consultation with the Director of NRR and the Deputy Executive Director for Reactor Programs, I authorized Davis-Besse's return to the ROP on July 1, 2005. In anticipation of the plant's transition from the IMC 0350 process, a deviation from the ROP was authorized on May 16, 2005, for the period of July 2005 through June 2006.

The actions we propose in this memorandum are planned for Davis-Besse for the time period of August 2006 through July 2007. This approach is consistent with our previously approved ROP deviation memorandum and the underlying concept of IMC 0305, in which the NRC, through its assessment process, has recognized that long-standing performance issues at a plant may require a more tailored, plant-specific, followup over an extended period of time.

#### 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. In particular, significant programmatic concerns in the areas of Operations, Engineering, Corrective Action, and Safety Culture/Safety Conscious Work Environment (SCWE) were identified through NRC inspections that were conducted after the wastage was discovered on the reactor vessel head.

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To address the programmatic issues that resulted in the reactor head degradation, and 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 implemented and commitments for actions targeting sustained performance improvement at Davis-Besse. Prior to granting restart authority to the licensee, the NRC 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 that the licensee had implemented lasting corrective actions and was able to sustain safe performance at Davis-Besse following restart, the NRC determined that a Confirmatory Order was necessary to modify their license to require annual independent assessments for 5 years in the areas of Operations, Engineering, Corrective Action, and Safety Culture/SCWE.

The licensee previously completed the first set of independent assessments required through our Confirmatory Order during calendar year (CY) 2004. During CY 2004 and CY 2005, inspectors evaluated the results of these CY 2004 independent assessments through a previously approved deviation from the ROP and determined that these assessments were adequately conducted to satisfy the requirements of the Order.

The licensee has also completed the second set of independent assessments for CY 2005 required through our Confirmatory Order. During CY 2005 and to date in CY 2006, inspectors have evaluated the results of these assessments and determined that they were adequately conducted to satisfy the requirements of the Order.

The licensee has recently started to perform the third set of independent assessments for CY 2006. These assessments are scheduled to be completed between June and November 2006; the results of which are planned to be submitted to the NRC between August 2006 and January 2007. The current deviation from the ROP to review these independent self-assessment activities expired on June 30, 2006. A renewal of the ROP deviation is required to continue our independent self-assessment review effort. This effort will include a review the CY 2006 assessment results in the Operations, Engineering, Corrective Action, and Safety Culture/SCWE areas.

#### Deviation Basis

When Davis-Besse exited the IMC 0350 process, it was placed in the Regulatory Response column of the Action Matrix based on one White finding in the Emergency Preparedness cornerstone. On January 1, 2006, Davis-Besse transitioned into the Licensee Response column of the Action Matrix. Although performance at Davis-Besse indicates that improvements have been realized, Region III believes that Davis-Besse continues to warrant NRC inspection beyond that which is prescribed by the ROP baseline inspection program to ensure compliance with the Order.

In the case of Davis-Besse, the March 8, 2004, Confirmatory Order required, in part, that FirstEnergy Nuclear Operating Company (FENOC) contract with external organizations to conduct comprehensive performance assessments in the areas of Operations, Engineering, Corrective Action, and Safety Culture/SCWE. 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 that 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, Region III believes that to adequately evaluate these independent assessment activities, some continued inspection beyond that which is prescribed by the ROP baseline inspection program for the period of August 2006 through July 2007 is appropriate. The estimated additional inspection resources required to perform these inspections would be about 50 hours of direct inspection effort for the Operations, Engineering, and Corrective Action areas; and 100 hours of direct inspection effort for the Safety Culture/SCWE area. The results of these inspections will be documented in the Davis-Besse quarterly integrated inspection reports.

#### Deviation Request

Davis-Besse is currently categorized within the Licensee Response column of the Action Matrix. Region III requests your approval to deviate from the Action Matrix for the period of August 2006 through July 2007 and perform additional inspections beyond that prescribed by the ROP baseline inspection program to evaluate the independent assessments conducted in the four areas described in our March 8, 2004, Confirmatory Order. These four areas are Operations, Engineering, Corrective Action, and Safety Culture/SCWE. Inspection activities associated with the review of each independent assessment would be similar to those approved through the previous ROP deviation memorandum and would include: 1) a review of each independent assessment plan prior to each assessment; 2) an evaluation of in-process assessment activities; and 3) a review of each final independent assessment report and associated action plans to resolve any areas for improvement as detailed in the reports. The additional inspection resources required to perform these inspections is estimated to be about 50 direct inspection hours for the Operations, Engineering, and Corrective Action Program areas; and 100 direct inspection hours for the Safety Culture/SCWE area (due to the additional anticipated effort resulting from the licensee's use of a different contractor), for a total of approximately 250 hours.

The 250 hours of direct inspection represents a reduction in inspection effort of over half from the 600 hours that was approved in the previous ROP Deviation, for the period of July 2005 through June 2006, authorized on May 16, 2005. We are seeking your approval of this ROP deviation to perform assessments of the licensee's third set of independent reviews. We will use the assessment results and ROP insights into overall plant performance to determine whether reviews of the licensee's future independent assessments, beyond the ROP baseline inspection program, are warranted.

Inspection Manual Chapter 0305, Section 06.06.h recognizes that for a period up to 1 year after a plant has exited the IMC 0350 process, the regional offices may utilize some actions that are consistent with the Degraded Cornerstone or Multiple/Repetitive Degraded Cornerstone column of the Action Matrix to ensure the appropriate level of oversight of licensee improvement



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initiatives. There are no provisions in IMC 0305 for additional inspection resources for facilities that have exited the IMC 0350 process after 1 year. Region III requests a Reactor Oversight Process Action Matrix Deviation to conduct the additional inspections as described above.

Approval: \_\_\_\_\_ Date: \_\_\_\_\_  
Luis A. Reyes

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