

June 1, 2004

MEMORANDUM TO: Davis-Besse Oversight Panel

FROM: John A. Grobe, Chairman, Davis-Besse Oversight Panel */RA/*

SUBJECT: REVISED OCTOBER 16, 2003, MINUTES OF INTERNAL MEETING OF THE DAVIS-BESSE OVERSIGHT PANEL (Revised Comment)

The implementation of the IMC 0350 process for the Davis-Besse Nuclear Power Station was announced on April 29, 2002. An internal panel meeting was held on October 16, 2003. Attached for your information are the minutes from the internal meeting of the Davis-Besse Oversight Panel.

Attachments: As stated

cc w/att: D. Weaver, OEDO  
J. Caldwell, RIII  
G. Grant, RIII  
S. Reynolds, DRP  
B. Clayton, EICS  
DB0350

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DATE	06/01/04	06/ /04	06/01/04	

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MEETING MINUTES: Internal IMC 0350 Oversight Panel Meeting  
Davis-Besse Nuclear Power Station

DATE: October 16, 2003

TIME: 8:45 a.m. Central

ATTENDEES:

D. Passehl	J. Hopkins	B. Ruland
C. Lipa	J. Stang	M. Phillips
J. Jacobson	A. Mendiola	M. Kotzalas
D. Hills	J. Shea	J. Grobe
S. Thomas	J. Jacobson	A. Muniz-Gonzalez

Agenda Items:

1. Discuss/Approve Today's Agenda

The Panel approved the agenda, but modified the order of presentations. **THE APPROVED AGENDA REFLECTS THE ORDER LISTED IN THESE MINUTES.**

2. Discuss Communication Team Issues

Mr. Stang led a discussion of the status of communication team issues. The communication team planned to meet later today to discuss new emails for disposition.

3. Discuss Punch List

Mrs. Lipa discussed status of Punch List items, particularly licensee milestone dates that need to be considered. Mrs. Lipa stated that she and Mr. Grobe would discuss the dates and incorporate these into future updates of the Punch List.

4. Discuss Restart Criteria from July 2003 Public Affairs Newsletter

The Panel agreed that Mr. Mendiola will contact the licensee today to discuss part of the July 2003 Public Affairs Monthly Newsletter, "Issues to be resolved in order for Davis-Besse to restart." That section of the newsletter was a plain language restatement of items in the Restart Checklist and the Panel Process Plan. Mr. Mendiola was to reiterate that, from the licensee's perspective, the issues that need to be resolved for Davis-Besse to restart are those issues in the Restart Checklist.

5. Discuss October 9 ASP Briefing Results

Mr. Grobe led a detailed discussion of the results of an accident sequence precursor (ASP) briefing held in Headquarters on October 9, 2003. There were two separate analyses that contributed to risk at Davis-Besse. The ASP analyses discussed covered one year prior to the shutdown period for the refueling outage, i.e., February 2001 to

February 2002. There was also the risk analysis performed as part of the Significance Determination Process (SDP).

The ASP is an integrated risk assessment that considers all the performance deficiencies and compares that risk to a baseline risk that assumes plant operation for one year. The ASP for Davis-Besse addressed three issues: cracking/corrosion/cavity of the reactor pressure vessel head; containment emergency sump clogging; and high pressure injection pump degradation.

Several fundamental questions were raised regarding the ASP analysis. The sump ASP used data from Generic Safety Issue-191, "Assessment of Debris Accumulation on PWR Sump Pump Performance." However, this did not consider the location of the loss of coolant accident, which was a critical piece of information. Use of the generic data from GSI-191 was not a reasonable assumption for Davis-Besse. In addition, the analysis for the high pressure injection pump assumed a failure frequency similar to what was used in the SDP for the recent analysis documented in the "Greater than Green" Letter (ml032810667). NRC Research was unaware that the licensee did a "2x" test which essentially doubled the clearances throughout the high pressure injection pumps, to determine the impact of debris induced degradation on the pumps. Mr. Grobe mentioned that without an understanding of the failure mechanism of the high pressure injection pumps, a failure probability could not be determined. Regarding the preliminary factor of one hundred increase due to initiating event frequency, over the 1 year period the initiating event frequency increase for a small break loss of coolant accident was estimated to be a factor of five thousand greater than the nominal frequency. The increase for a large break loss of coolant accident (defined as a hole greater than 9 inches in diameter) was estimated to be a factor of six thousand, which did not seem to be supported when compared to the risk from a small break loss of coolant accident during the 2001-2002 time frame.

There were also questions raised regarding which failure model for the reactor head material. The preliminary analysis assumed a plastic deformation model. However, the data generally followed a ductile tearing model. Therefore, the question of data being discrepant with the model needs to be addressed. There were some uncertainties that need to be addressed as well, including the shape of the cladding used in the model (cylindrical or toroidal); singular versus multiple cracks, cladding properties, impacts of pressure, impacts of crack length, depth of cracks, etc. Mr. Grobe suggested that before the ASP analysis is finalized, two things should occur: (1) The licensee should be engaged to provide additional insights on debris generation and transport. (2) The analysis should receive review by an independent expert panel. Mr. Grobe was planning to contact NRC Research personnel later today to discuss the suggestions. Mr. Grobe reiterated that the outcome of the ASP analysis has no impact on restart of Davis-Besse and that the ASP process should proceed normally.

6. Discuss Tracking of TI 2515/150 Rev. 2, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-02) and Plans to Address TI 2515/153, "Reactor Containment Sump Blockage (NRC Bulletin 2003-01)"

Mr. Hills led a discussion on tracking of Temporary Instruction (TI) 2515/150 Rev. 2, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles

(NRC Bulletin 2002-02) and plans to address TI 2515/153, "Reactor Containment Sump Blockage (NRC Bulletin 2003-01)." Regarding TI 2515/150, the Panel determined that the TI does not have to be performed prior to restart. Mr. Hopkins commented that the licensee is committed to Order EA-03-009. Mr. Hills stated that his Branch (MEB) has responsibility for tracking performance of TI 2515/150 to ensure that it is performed at the proper time.

Regarding TI 2515/153, the Panel determined that Mr. Thomas (Davis-Besse Senior Resident Inspector) will be assigned performance of TI 2515/153. The Panel determined that TI 2515/153 needs to be performed prior to restart. Mr. Hopkins commented that NRR is about to issue an evaluation letter to NRC Bulletin 2003-01 with a Generic Letter to follow which will require more detailed analysis. Mr. Passehl took an action to add performance of TI 2515/153 to the Reactor Program System (RPS).

7. Discuss Time Line for 10 CFR 2.206 Petition Submitted on August 25, 2003, (Accession no. ml032400435) by Greenpeace, on Behalf of NIRS and UCS.

Mr. Hopkins led a discussion of the time line for 10 CFR 2.206 Petition submitted on August 25, 2003, (Accession no. ml032400435) by Greenpeace, on behalf of the Nuclear Information Resource Service (NIRS) and the Union of Concerned Scientists (UCS). Mr. Hopkins stated that an acknowledgment letter was issued (ml032690314) on October 7, 2003. The proposed draft Director's Decision is scheduled to be issued during the first week of February 2004 (120 days). The licensee is supposed to supply a response to the petition tomorrow and then NRC plans to issue a followup letter by November 7, 2003, to address the immediate action request.

Mr. Hopkins also commented that the licensee plans to submit their letter on 10 CFR 50.54f by the end of this month. The NRC intends to use this letter as input to the draft Director's Decision to be issued in February 2004.

8. Discuss New Allegations and Determine Whether Any Are Required to Be Resolved Prior to Restart

Mr. Passehl commented that one new allegation was discussed during an Allegation Review Board yesterday. The Panel concluded that closure of this allegation was not required before restart.

9. Discuss/Update Milestones and Commitments

The Panel reviewed and discussed upcoming milestones and commitments.