

May 20, 2004

MEMORANDUM TO: Davis-Besse Oversight Panel

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

SUBJECT: MINUTES OF INTERNAL MEETING OF THE DAVIS-BESSE
OVERSIGHT PANEL

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 January 6, 2004. Attached for your information are the minutes from the internal meeting of the Davis-Besse Oversight Panel, the approved RAM Closure Forms, and the "Open" Action Items List.

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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OFFICE	RIII		RIII		RIII		RIII	
NAME	RBaker/trn		DPassehl		CLipa		JGrobe	
DATE	05/17/04		05/20/04		05/17/04		05/20/04	

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

DATE: January 6, 2004

TIME: 12:30 p.m. Central

ATTENDEES:

J. Grobe	W. Ruland	S. Thomas
C. Lipa	A. Mendiola	R. Baker
D. Passehl	J. Hopkins	R. Skokowski
M. Phillips		D. Hills

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 Plant Status and Inspector Insights and Emergent Issues List

S. Thomas led a discussion of plant status and inspector insights and emergent issues. The plant is at Normal Operating Pressure and Normal Operating Temperature (NOP/NOT). The plant entered a 72 hour LCO for Auxiliary Feedwater (AFW) system (Train #1) at 15:11 (EST) on January 5, 2004, to conduct time response testing on #1 AFW pump. The pump did not pass the initial time response testing, and the licensee is replacing the governor. The residents will be observing the ongoing work and the required post maintenance testing.

Additionally, the licensee is evaluating a seal return flow high condition on Reactor Coolant Pump (RCP) 2-2.

3. Panel Review/Approve RRATI Followup Inspection Plan

R. Skokowski led a discussion on the draft Followup RRATI inspection plan. The Panel suggested adding one RAM item for review by the inspection team, RAM Item SUP-48 on AFW configuration changes. Based on inspection objectives fulfilled during the first RRATI, a 72 hour around-the-clock coverage item will not be included in this plan. The plan does include a provision for observation of "deep" back shift evolutions. The Panel concurred with this suggestion. The Panel suggested several updates to bullets listed in Section B.

R. Skokowski took the action to revise the inspection plan and present it for approval at a future Panel meeting.

4. Discuss Status of RRATI RAM Items/Restart Checklist Items 5.b & 5.c

D. Passehl led a discussion on documenting closure of RAM items completed by the RRATI inspection, and closure criteria for Restart Checklist Items 5.b and 5.c. The Panel discussed key issues assessed to date for both Restart Checklist Items and these issues will be summarized in separate closure documents for each item. Draft of the closure documents will be presented to Panel on 1/20/04 for possible closure.

5. Discuss Draft December Monthly Report to Congress Input

D. Passehl presented the draft input for the December Report to Congress for the Panel's review and comment. The Panel provided editorial suggestions, which D. Passehl took action to incorporate. The Panel approved the December input and D. Passehl will send out the updated document later today.

6. Discuss RIII Input to Greenpeace 2.206 Petition

D. Passehl led a review of the Region III input for the proposed Director's Decision on the Greenpeace 2.206 petition. The Panel concurred with sending this input to M. Fields, who will use the input for structuring the response.

7. Confirm Restart Public Meeting Time/Location

D. Passehl informed the Panel that possible locations were still being evaluated. The Panel decided that the meeting will be held in the evening from 6:00 p.m. - 10:00 p.m. EST, and a site will be selected by the end of the week.

8. Discuss Licensee Agenda for January 11 ROP Meeting

C. Lipa led a discussion on the licensee proposed agenda for the 1/11 Restart Overview Panel meeting. The Panel concurred that an appropriate NRC presence would be for J. Grobe and S. Thomas to attend the meeting. No changes to the agenda topic were suggested; however, some of the time allotments for topics will be addressed with the licensee.

9. Discuss Concerns from Regional Administrator Brief

The Panel discussed several issues highlighted during the recent brief with the Regional Administrator.

1) The Regional Administrator would like to meet with the 0350 Panel members. Interviews will be set up with the individuals, to be completed prior to finalizing a decision on restart.

2) The Panel needs to be informed about the status of the Grand Jury concerning issues which could impact a restart decision. W. Ruland took an action to brief the Panel with an update from the NRC contact working with DOJ.

NEW ACTION ITEM (234) - W. RULAND TO DEVELOP PROTOCOL PAPER FOR NRC REPRESENTATIVE ON DOJ COMMITTEE INTERFACE WITH 0350 PANEL FOR UPDATES.

- 3) The Panel needs to develop a "List of Vulnerabilities" from both licensee and NRC inputs for issues which could effect restart/mode change.
- 4) The Regional Administrator requests the licensee provide a high-level schedule of expected evolutions during NOP/NOT operations. This information should remain current with the Panel working out the process of providing frequent updates for the EDO and Chairman.

10. Discuss New/Potential Licensing Issues

J. Hopkins informed the Panel that there were not any new licensing issues. The licensee has requested a teleconference with NRC Senior Management to discuss the status on the High Pressure Injection pump modifications. C. Lipa will get a prebrief from NRR on review status of the Engineering Design Modification package.

J. Hopkins also briefed the Panel on the status of the licensee's Steam Generator (SG) Inspection. The licensee will have responses to the remaining eight questions from the previous March 2002 SG inspection RAI by the close of business today. Once NRR has evaluated the responses, there may be an additional RAI issued concerning the license amendment request itself. J. Hopkins will keep the Panel briefed on evaluation of the license amendment request.

11. Discuss Communication Status

A. Mendiola briefed the Panel on communication status. The Communications Team will conduct a meeting tomorrow focusing on disposition of recent emails and letters received and on resolution of several Green Ticket items currently being worked. An update will be presented at the next Panel meeting. Q&As for restart will be ready for routing by next Tuesday.

12. Discuss RAM Closure Items

M. Phillips led a review of RAM Items presented for closure. **THE RESTART ACTION MATRIX ITEMS APPROVED BY THE PANEL FOR CLOSURE ARE ATTACHED TO THESE MINUTES.**

13. Discuss Revised Restart Recommendation Memo

M. Phillips led a discussion on the Panel's draft Restart Recommendation Memorandum. The discussion focused on a review of the attachments to the memorandum and editorial changes to clarify that issuing a Confirmatory Order is separate from the restart recommendation. M. Phillips took the action to update the body of the memo, and R. Baker took the action to update the attachment documents.

14. Discuss Responses Received for Staff Restart Concerns and If Additional Polling Required

The Panel reviewed the responses from the Staff Restart Concerns requests. Each of the concerns is being addressed as a RAM Item to ensure resolution prior to making a restart decision. The recommendation was made to send separate requests to contractors who participated in special inspections. The Panel will review this recommendation and issue requests as appropriate.

15. Discuss Agenda for Licensee's Weekly Status Call

C. Lipa led a discussion on topics to discuss with the licensee during the next weekly call. Three key items were suggested.

- 1) Request an update on actions taken by the licensee to resolve all the issues identified concerning the AFW pumps governor valves and operability.
- 2) Request an update on resolution of the seal return flow high condition on RCP 2-2.
- 3) Request an update on observations or comments from the ongoing 10 day self-assessment of operations period.

16. Discuss Action Items

One new Action Item was added to the list. **THE UPDATED "OPEN" ACTION ITEMS LIST IS ATTACHED TO THESE MINUTES.**

17. Discuss/Update Milestones and Commitments

The Panel reviewed and discussed upcoming milestones and commitments.

18. Review Key Items Scheduled for Next Panel Meetings

C. Lipa discussed key items scheduled for upcoming Panel meetings. The next Panel meeting is scheduled for Thursday, January 8 at 12:30 p.m. EST.

RAM Items Approved for Closure at Panel

January 6, 2004

RAM Item No. - L-84

Closed: Y

Date of Letter - 12/16/02

Author - Gurdziel (G-17)

Description of Issue - If GDC-32 does not apply to the D-B reactor vessel, just how many reactors does it apply to, and why wouldn't it apply to the modification to the in-core tubes of the D-B reactor.

Restart Checklist Item: N/A

Description of Resolution - 10 CFR 50, Appendix A, General Design Criteria including Criterion 32, "Inspection of Reactor Coolant Pressure Boundary," became effective on May 21, 1971. The GDCs apply to those plants that received a construction permit on or after that date. Since the Davis-Besse construction permit was issued before the above date, GDC-32 would not apply to any modification of their reactor vessel bottom head incore instrumentation penetration nozzles. However, Davis-Besse was licensed to similar requirements that would have to be met if modifications were made to the bottom head incore instrumentation penetration nozzles.

RAM Item No. - L-93

Closed: Y

Date of Letter - 02/10/03

Author - Lochbaum

Description of Issue - Has the Davis-Besse PRA been revised to account for reactor vessel damage?

Description of Resolution - The licensee's PRA would not need to be revised to account for reactor vessel damage because the licensee has replaced the reactor vessel head; therefore, no additional increase in initiating events (SLOCA, MLOCA, LLOCA) is necessary for their current PRA model.

RAM Item No. - SUP-17

Closed: Y

Description of Issue - Review of Licensee Control Systems for Identifying, Assessing, and Correcting Performance Deficiencies: Determine whether the process for allocating resources provides for appropriate consideration of safety and compliance, and whether appropriate consideration is given to the management of maintenance backlogs and correction of work-arounds.

Description of Resolution - In reviewing post-restart backlog, the backlog inspection team determined that the licensee appropriately categorized the backlog as post-restart and noted that the deferred backlog did not have a high risk significance.

The backlog inspection team evaluated the licensee's use of PRA insights relating to the backlog of open work requests. Specifically the team reviewed a detailed risk evaluation of plant material condition backlog items completed by the licensee's PRA group. This assessment used overall conservative bounding values with respect to the potential affects of the known equipment backlog deficiencies on both initiating event frequencies and equipment mitigation capabilities. The team found the licensee's assessment conservative and represented a very low increase in core damage frequency considering the backlog of maintenance items at startup.

Detailed review of the backlogged items, review of self assessments, discussions with system engineers, management discussions, and system health meetings concerning the post-restart backlog assured the inspectors that the restart scoping process was satisfactory and deferred actions did not individually or collectively have a risk-significant impact on plant restart.

Reference Material - NRC Inspection Report Nos. 50-346/02-11 (ADAMS Accession No. ml031880844) and 50-346/03-24 (ADAMS Accession No. ml040060504).

RAM Item No. - SUP-32

Closed: Y

Description of Issue - Assessment of Performance in the Reactor Safety Strategic Performance Area: Key Attribute - Design: Determine if the system is operated consistent with the design and licensing documents.

Description of Resolution - This inspection attribute was addressed by the performance of an in-depth design and performance capability review of the Service Water, High Pressure Injection, and 4160 Volt Electrical Distribution systems as part of the Safety System Design Inspection. The inspection is documented in NRC Inspection Report No. 50-346/02-14, dated February 26, 2003. Additionally, the program for Resolution of Open Design Questions, which was developed as a result of the discovery phase, was also reviewed as part of inspection 50-346/03-03. That inspection monitored and evaluated the extent of condition reviews generated as a result of design issues identified, and the NRC inspectors concluded that these extent of condition reviews were conducted in an appropriate manner with acceptable results.

Reference Material - NRC Inspection Report Nos. 50-346/02-14 (ADAMS Accession No. ml030630314) and 50-346/03-03 (ADAMS Accession No. ml032950012).

RAM Item No. - SUP-53

Closed: Y

Description of Issue - Assessment of Performance in the Reactor Safety Strategic Performance Area: Key Attribute - Configuration Control: Review the results of the plant specific IPE relative to the system(s) selected. Determine if the IPE is being maintained to reflect actual system conditions regarding system capability and reliability.

Description of Resolution - The backlog inspection team reviewed the tracking of modification activities that would require updating of the PRA to reflect actual plant conditions/operation. Relative to PRA updating following a modification, the team found that the design control process specified the issuance of a condition report if a modification could affect the PRA. The condition reports were then reviewed by the PRA staff to determine the need for a PRA update. In some cases the CR was issued long before the modification was actually installed and used as a tracking mechanism. The team noted that recent modifications to the HPI system did not require an update to the PRA, because the modifications were restoring the systems to conditions already assumed in the PRA.

Reference Material - NRC Inspection Report 50-346/03-024 (ADAMS Accession No. ml040060504).

RAM Item No. - LER-19

Closed: Y

Description of Issue - Potential Inoperability of Decay Heat/Low Pressure Injection System due to loss of valve disc pins.

Description of Resolution - The licensee determined that the loss of the taper pins was due to incorrect installation of the pins by the vendor coupled with vibration induced flow during valve testing and lack of adequate taper pin staking. The missing pins could not be located in the piping adjacent to the valve and are considered to be foreign material that may have been transported to the reactor vessel. The licensee performed an evaluation comparing this debris condition to Framatome ANP 51-501734-00, dated March 11, 2002, "Reactor Operation with Loose Parts at Davis-Besse." This evaluation compared the potential effects of specified taper pins to the potential effects of several steam generator plugs in circulation. The current condition was considered to be bounded by the Framatome evaluation relative to the effect on fuel fretting. The licensee evaluation concluded that there was low likelihood that the taper pins would cause fuel fretting. Framatome reviewed the licensee's evaluation and concurred with its conclusions. The licensee has taken corrective actions to properly install and stake the taper pins in DH14B. The licensee also ensured that the taper pins were correctly installed and staked in DH13A, DH13B, and DH14A (valves which utilized a similar disc taper pin arrangement). The licensee has taken additional corrective actions to ensure that maintenance procedures for the various butterfly valves installed at Davis-Besse have been revised to ensure that the taper pins or keys are staked or welded. Full details are addressed in NRC Inspection Report No. 50-346/2003-022.

Reference Material - NRC Inspection Report No. 50-346/03-22 (ADAMS Accession No. ml033570081).

RAM Item No. - NCV-17

Closed: Y

Description of Issue - Failure to adequately verify the accuracy of ECCS design calculations. Specifically, the NRC inspectors identified that net positive suction head (NPSH) calculations for the low pressure injection (LPI) and containment spray (CS) pumps did not adequately address the head loss through several system piping fittings and used a potentially non-conservative

value for minimum containment water level. Calculation C-NSA-059.01-019 used an incorrect water volume for the core flood tank water volume when determining the minimum containment water level, and calculation C-NSA-049.02-26 failed to incorporate correct head loss terms for several components when determining the available NPSH for the LPI and CS pumps. In addition, the NRC inspectors identified that the licensee had removed, during a sump design modification, anti-vortex cruciforms from the ECCS emergency sump suction inlet which increased head loss.

Description of Resolution - The performance deficiency associated with this event was the failure to adequately verify the accuracy of ECCS design calculations. The inspectors performed a technical review of revised calculations C-NSA-049.02-26, "NPSH Licensing Basis Analysis for Davis-Besse LPI and CS Pumps," and C-NSA-059.01-019, "Water Level Inside Containment Post LOCA." The inspectors concluded that the licensee's re-evaluation of LPI and CS system NPSH margin during alignment to the emergency sump appropriately addressed and resolved the technical concerns. Additionally, the licensee revised Engineering Change Request 02-0512-00, "Replace Containment Emergency Sump Strainer," to install rounded inlet flanges on each ECCS sump suction inlet to reduce system head loss.

Reference Material - NRC Inspection Report Nos. 50-346/03-006 (ADAMS Accession No. ml031710897) and 50-346/03-017 (ADAMS Accession No. ml032721592).

RAM Item No. - NCV-31

Closed: Y

Description of Issue - Square D EDG Relays In the Start and Run Circuits Were Not Rated For the Current Application.

Description of Resolution - The licensee performed testing that was statistically significant. The licensee tested 10 relays at the expected DC amperage. Each relay was cycled 500 times. There was no noticeable degradation of the contacts on any relay. The vendor stated that the testing was acceptable. Based on the inspector's technical judgement, the testing that the licensee has done is suitable to show that there is a low probability of relay failure.

Reference Material - NRC Inspection Report No. 50-346/03-022 (ADAMS Accession No. ml033570081).

January 6, 2004

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST			
Item Number	Action Item (Date generated)	Assigned to	Comments
197	Develop a communication plan with restart Qs and As. (06/17)	J. Stang	6/24-Lead changed; 08/21-Lead changed; 09/30-Discussed, list of Q & As is being gathered for review and forwarding to RA; 10/14-Discussed, J. Shea is compiling the list of Q & As for review by the Panel and results will be forwarded to the RA; 10/21-Brainstorming session to occur 10/23 to final presentation to Panel; 11/20- The list of Q&As will be inserted to the Comm Matrix today; 12/15-Discussed, Plan with Panel Chairman; 12/30-Discussed, major rework in progress and plan will need to go back into concurrence.
208	Evaluate the need to call back CI regarding Allegation RIII-2002-A-0177 (D-B) after the OI Investigation is complete (08/21)	M. Phillips	10/14-Investigation is still ongoing; 12/23-Discussed, awaiting DOJ Investigation.
212	Determine whether the Communication Team has received all electronic and written correspondence from external sources. If there is reasonable confidence that the Communication Team has all the correspondence then develop a set of bullets explaining why there is reasonable confidence. (09/23)	J. Stang	10/14-Discussed, Set of bullets still under development; item will be discussed at next Panel meeting on 10/16; 11/04 - Discussed, J. Stang is adding to Comm. Matrix; 11/20-Only remaining is the documented criteria for proof of reasonable confidence; 12/15-Discussed, all inputs received from panel members- closure memo to document completeness confidence in draft and will go to Panel next week; 12/30-Discussed, Bullets in review and NRR will forward to Region; 1/06-Discussed, List of Bullets in final review and will be disseminated 1/09/04.
219	Brief Jim Caldwell on how Immediate Action Maintenance issue was resolved. He would like to see the revised procedure. (10/21)	S. Thomas	10/28-Brief will include research information on Exelon approach; 11/20-NRC is reviewing a copy of the licensee's revised procedure; 12/15-Discussed, FENOC rep met with SRI 12/14 to review new procedure; 12/18-Discussed, need to setup briefing for RA; 1/06-Discussed, brief will be given to Branch Chief with follow on briefing for Jim Caldwell.

January 6, 2004

DAVIS-BESSE OVERSIGHT PANEL "OPEN" ACTION ITEM LIST			
Item Number	Action Item (Date generated)	Assigned to	Comments
220	Develop inspection plan requirements which include review of post restart security program effectiveness. (10/28)	D. Passehl	11/20-The plan is being developed and supplemented from baseline requirements; 12/15-Discussed, draft plan in final.
224	Rewrite the proposed IN on TSP to be generic and reflect attainable plant conditions and what information should be disseminated to the industry concerning Boric Acid Corrosion Control Programs. (12/09)	D. Hills	12/15-Discussed, D. Hills is working; 12/23-Discussed, this issue will be discussed internally in RIII and brought to Panel on 1/06/03 for a final decision on how to proceed.
228	Place all Email requests sent throughout Agency, responses received, and issue resolutions in ADAMS package for documentation. (12/16)	M. Mitchell	1/06-Discussed, will verify ADAMS package is in place to support collection of emails and responses-email requests will be resent due to small response to date.
231	As soon as the final RRATI report is issued, Email a copy to Rick Jacobs at INPO.(12/19)	D. Passehl	
232	Track the status of the response to Gunter on Fire Protection Issues due 01/09/04. (12/30)	J. Stang	12/30-Discussed, J. Dyer briefed on 12/29/03; J. Caldwell brief scheduled for 12/31/03.
233	Determine if a new allegation, or new information is presented in the 12/18/03 Lochbaum letter. (12/30)	M. Phillips/ Jacobson	12/30-Discussed, should have an answer by 01/09/04.
234 (NEW ITEM)	Develop protocol paper for NRC representative on DOJ committee interface with 0350 Panel for updates. (1/06)	W. Ruland	