

June 26, 2002

MEMORANDUM TO: File (Davis-Besse)

FROM: Douglas V. Pickett, Senior Project Manager, Section 2 /RA/
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION - SUMMARY OF
NUCLEAR REGULATORY COMMISSION (NRC) ACTIVITIES FOR THE
WEEK OF APRIL 29, 2002, RE: CONTROL ROD DRIVE MECHANISM
(CRDM) NOZZLE PROJECT (TAC NO. MB4479)

April 29:

Attachment 1 is the licensee daily status summary, which is used as the agenda for the daily status call. Attached is the plan for extraction and preservation of Nozzle No. 3 cavity area for root cause analysis. Items discussed during the telecon included:

- The extent of condition walkdowns (Confirmatory Action Letter Item 3) are continuing. This is not a Code inspection. Tim Steingass again questions qualifications of inspectors. Final docketed response needs to show how their program satisfies Appendix B.
- Licensee states that Relief Requests (RR)-A23 and RR-A24 will be needed to support repair plans for Nozzle 2. They were submitted on April 25.
- Nozzle 46 to be machined tomorrow. DPT tests scheduled for COB Wednesday (May 1).
- First abrasive water cut on mock-up scheduled for May 2. This will be 10" cut. Second mock-up cut scheduled for May 4-5. We indicate we do not care about witnessing mock-up cuts.
- We inform licensee that due to work on Freedom of Information Act, we have not had time to focus on extraction and preservation plan.
- Licensee plans to cut reactor pressure vessel (RPV) head on May 10. We question what they intend to do with cavity once removed. Mark McLaughlin commits to provide plan this week.

Participants included:

Bill Bateman	Allen Hiser	Stephen Sands	Tim Steingass
Ken Chang	Jim Davis	Steve Long	Simon Sheng
Doug Pickett			

April 30:

By letter (ADAMS No. ML021230320) from H. Bergendahl (licensee) to J. Dyer (RIII), the licensee provided responses to NRC questions on the preliminary probable cause summary report dated March 22.

May 1:

Attachment 2 is the licensee daily status summary, which is used as the agenda for the daily status call. Attached is the revised Nozzle 3 Cavity Extraction and Preservation Plan along with drawings of the device to be used to secure and support the specimen after the cut is completed. Bill Bateman questions licensee's intention to procure RPV head from Midland. He describes resource demand on staff to conduct parallel repair/replacement plans. Licensee intends to make decision in next couple weeks.

May 1:

Attachment 3 is an email from Tony Mendiola to Mindy Landau requesting guidance regarding teleconferencing expectations for future public meetings.

May 1:

Attachment 4 is an email from licensee (MLeisure) providing Sample Plan Phase 3 along with Inventory of Root Cause Investigation Samples Quarantine List.

May 2:

Trip Rothschild and Grace Kim of the Office of the General Counsel (OGC) meet with Tony Mendiola and Doug Pickett to discuss recent discussions between FENOC lawyers and OGC. Licensee lawyers describe plan to ship Midland head to Babcock & Wilcox Canada for refurbishment. This may require export license due to nuclear non-proliferation concerns. 10 CFR Part 110, Appendix A describes requirements for export licenses for major fabricated parts. We agree the RPV head falls in this category. Export license would require Executive Branch approval, a Federal Register notice, and Opportunity for Hearing. We discuss process if RPV head is shipped outside U.S.

May 2:

Attachment 5 is an email from Simon Sheng providing the revised safety evaluation report outline for the RPV repair plan.

May 3:

Attachment 6 is the licensee daily status summary and attached planned outline for May 7 root cause analysis report meeting. Items discussed during the telecon included:

- We discuss agenda for May 7 Root Cause meeting.
- Simon Sheng has questions on repair plan for Nozzle 2. Questions to be provided to licensee next week.
- Steps 1-12 for mock-up already approved.
- Request for additional information for Safety Significance Assessment to be issued by Region III.
- Nozzle 46 machined per repair plan. Dye-penetrant test performed. Two thin indications/shadows observed. Licensee did not cut all of nozzle material out of the

bore. DPT results did not show evidence of cracks. Pitting observed but not associated with boric acid. Pitting characterized as being 1/32-inch. Licensee still evaluating. Licensee agrees to provide video tape of Nozzle 46 to staff.

- Test cuts are complete on mock-ups. Qualification cuts to begin tomorrow. Final qualification cut scheduled for next Wednesday or Thursday.

Participants included:

Bill Bateman
Simon Sheng

Ed Andruszkiewicz
Allen Hiser

Steve Long
Singh Bajwa

Andrea Lee
Doug Pickett

May 3:

Telecon conducted with Bob Schrauder, head of Davis-Besse replacement team, and Dale Wuokko to discuss RPV head replacement. This is first serious call with licensee concerning replacement of RPV head with Midland head. Schrauder describes three-way plan to have Framatome purchase RPV head and service structure "as-is" from Consumers Power and then sell as engineered safety feature equipment to FirstEnergy. Midland Unit 2 head has been on special pad inside containment since plant canceled in mid-1980s. Midland head is of similar design as Davis-Besse and CRDMs made of same materials and thus, similarly susceptible to CRDM cracking. Acknowledgment that Midland head has not been stored in quality program. Framatome needs to restore original qualifications including N-stamp.

Discussion focuses on quality assurance. We have Bill Bateman, Rich Barrett, Singh Bajwa, and Doug Pickett in attendance and no one from quality assurance (QA) section. FirstEnergy has inspected head and acknowledges some rust on head but overall acceptable for use. Consumers presents 30-day offer to FirstEnergy. We believe QA records to be main resolution. Schrauder acknowledges that some paperwork has not been recovered. Licensee hopes to augment lack of paperwork with augmented nondestructive examination. We stress importance to have 10-day public notice of meeting for replacement head.

Docket No. 50-346

- Attachments:
1. April 29 licensee daily status summary and attached plan for extraction and preservation of Nozzle No. 3 cavity area for root cause analysis (4 pages)
 2. May 1 licensee daily status summary and revised Nozzle 3 Cavity Extraction and Preservation Plan (7 pages)
 3. May 1 email from AMendiola to MLandau requesting guidance concerning teleconferencing expectations for future public meetings (1 page)
 4. May 1 email from licensee providing Sample Plan Phase 3 along with Inventory of Root Cause Investigation Samples Quarantine List (5 pages)
 5. May 2 email from Chia-Fu Sheng providing Revised SER Outline for Repair Plan (4 pages)
 6. May 3 licensee daily status summary and attached planned outline for May 7 root cause analysis report meeting (3 pages)

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*See previous concurrence