

**UTILITY RADIOLOGICAL SAFETY BOARD OF OHIO
MEETING MINUTES
JULY 7, 2009**

Mr. Robert Owen, Vice Chair called to order the July 7, 2009 meeting of the Utility Radiological Safety Board of Ohio at 1:30 p.m.

The first order of business was roll call, taken by Carol O’Claire.

I. ROLL CALL

EMERGENCY MANAGEMENT AGENCY
DEPARTMENT OF HEALTH
DEPARTMENT OF AGRICULTURE
PUBLIC UTILITIES COMMISSION
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF COMMERCE

MR. ROBERT OWEN
MR. CHUCK KIRCHNER
MR. SHAWN SMITH
MS. PETER WHITEHOUSE
MR. DEAN JAGGER

A quorum was declared.

II. READING OF THE APRIL 6, 2009 MINUTES (ADOPTED)

Mr. Owen asked for any additions, corrections or deletions to the minutes. He then asked for a motion to approve the April 6 minutes. Mr. Chuck Kirchner of the Department of Agriculture (ODA) moved and Mr. Shawn Smith of the Public Utilities Commission (PUCO) seconded. The motion was carried.

III. OLD BUSINESS

- A. Ms. Carol O’Claire reviewed the changes in the Working Group initiatives led by Ohio Emergency Management Agency (EMA).

The Davis-Besse Partial Participation Exercise was held on May 12. The state has received the draft report as of June 26. The state received no Deficiencies or Areas Requiring Corrective Action (ARCA). There were three planning issues for Ottawa County and one previous ARCA was cleared. Lucas County had one ARCA which was redemonstrated and cleared on the spot.

The 2010 Beaver Valley Power Station full participation exercise is scheduled for April 20, 2010. The dry run and exercise will be conducted in the evening.

The Reactor Oversight Matrix was reviewed. All FENOC plants are in Column 1 and are at 100 percent power.

Under Plant Oversight: First Energy has completed the independent assessments as part of the authorization to resume operations at Davis-Besse following the reactor head degradation.

On August 15, 2007 the NRC issued a Confirmatory Order to FENOC to formalize commitments made following the NRC Demand for Information (DFI) of May 14, 2007. The DFI was regarding the Exponent Report and subsequent related reports referencing the Davis-Besse head degradation. Davis-Besse has committed to comply with the components of the Confirmatory Order. An effectiveness review was conducted in January, 2008 with positive results. An additional effectiveness review was conducted in January, 2009 with positive results. The results of the assessment are being submitted to the NRC by March 23, 2009. Upon successful completion of the 2009 review, it is anticipated that the Confirmatory Order will be closed. FENOC will address this in their report later in the meeting.

Technology: E-data has not been completed for Davis-Besse or Beaver Valley. It will be available for the 2010 Beaver Valley Exercise.

The Virtual Plume systems were used during FMT training conducted on March 27, 2009 and were used during the DBNPS dry run. One additional unit has been received and is scheduled for use during the 2010 Beaver Valley exercise which will allow three teams to be demonstrated.

All counties have received the Ludlum Model 3 instruments. 2500 pocket ion chambers, model 730, have been received to replenish dosimetry available for emergency workers. Additional Ludlum Model 3 instruments and model 730 dosimeters were received in SFY2009. Mike Dues will be one of the FENOC representatives to the committee being formed to make recommendations for upgrades or replacements for equipment and create a long-term plan.

The state continues to attempt to incorporate NIMS into the state plan.

The next After Action meeting for the Davis-Besse partial participation exercise will be conducted on August 6, 2009.

Ingestion Zone Rentry/Recover Advisory Group: IZRRAG training will be conducted on September 9, 2009. The tabletop drill is scheduled for September 23, 2009. October 21 will be a Field Monitoring Team drill. The next evaluated ingestion exercise for the State will be in 2012 with the Perry plant.

The Working Group has assessed the need for consistent plant data in the Assessment Room. FENOC attended the Beaver Valley 2006 exercise to evaluate state dose assessment needs. Currently there is no plant data link from Beaver Valley to the state EOC.

The Comprehensive Reviews have been received by FENOC and is being reviewed by the utility and they will be providing information later in the meeting and at a follow up briefing.

Hostile Action based drills: Upon completion of the hostile action drill program nationwide, there will be outreach opportunities for states and locals will be scheduled. The information and lessons learned collected will be compiled and used

during the rulemaking process. They will begin demonstrating hostile action drills in 2010.

Mr. Steve Helmer updated the Board of the initiatives lead by ODH.

EPA 400 is changing the parameters that the state will need to look at and will make the current dose assessment difficult to update. Ohio will need to look at obtaining a new dose assessment program. The state has been working with FENOC. One request was that FENOC attend a Working Group meeting and perhaps that is the place to begin.

KI: the state has received the approximately 1.4 million tablets in May. ODH has updated their KI website and KI policy. They removed the old KI date extension references and put in the expiration date for the new KI. Several teleconferences were held with the counties and local departments of health. The counties have requested baggies and inserts to break down the KI into more individual amounts. That order of baggies should be in by August. ODH will provide support if requested.

B. Midwestern Report

Yucca Mountain Update

As reported, the Yucca Mountain project has been shelved. The project will only receive funding in support of the NRC licensing process for lessons learned only. The funding will also pay for the Administration's effort to devise a new strategy toward nuclear waste disposal.

Devising a new strategy for disposing of the nation's highly radioactive waste will be the task assigned to a new National Commission on Nuclear Waste. The bill would establish an 11-person panel of presidential appointees and charge it with studying and making recommendations on the following topics: alternatives to Yucca Mountain, lessons learned from the current program, incentives for states that are willing to host a facility, the advanced fuel cycle, and alternative means of managing, operating, and financing the program. The commission would have two years to complete its task.

National Transportation Plan

The Northeast, Midwest, and West regional groups submitted a joint letter to DOE, commenting on DOE's National Transportation Plan for repository shipments. Basically, the comments centered on the plan not being comprehensive in scope.

The Midwestern Radioactive Materials Transportation Committee submitted a separate letter supporting the joint letter. In addition to supporting the broad themes in the joint letter, the Midwestern committee provided more detailed recommendations for changes. Recommendations were also made on considering road and weather conditions in transportation planning.

It is believed that a comprehensive national transportation plan is needed, regardless of the location of the repository.

DOE Shipments

The Midwestern states affected by WIPP shipments participated in the review of the Midwest's Planning Guide for Shipments of Radioactive Materials through the Midwestern States. Pursuant to a review and comment process involving all committee members, the section on weather and road conditions has been updated.

An example of the need to continue collaborative transportation planning with the states is a change in route for a shipment of low-level radioactive waste in a Type B container from the Batavia National Lab (BNL) for disposal at the Nevada Test Site.

In addition to this frustration, the BNL shipment raised the issue of whether DOE has committed to following the NRC's additional security measures for shipments in quantities of concern (RAM/QC). According to the DOE, they will issue a policy in support of this once the NRC codifies this requirement in rule.

Transportation Fees

A conference call is planned for all Midwestern states charging fees for the transportation of radioactive waste within and through their states. The call will take place on July 23.

Proposed International Atomic Energy Agency (IAEA) Changes

On June 2, the *Federal Register* contained a notice from DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) requesting comments on "issues or problems" regarding the IAEA's "Regulations for the Safe Transport of Radioactive Material," known as TS-R-1. The stated purpose of the notice was to "assure opportunity for public participation in the international regulatory development process," with PHMSA and its partner agency the NRC, seeking to identify "potential changes or solutions to resolve any identified issues or problems" in the draft 2009 version of the TS-R-1.

The comment period was only 12 days long,

A 60-day extension for comments has been requested. If the PHMSA and the NRC follow through on the extension, the regional groups will organize an interregional working group to review all the proposed changes and prepare comments. As Chair of the Conference of Control Program Directors (CRCPD) Working Group on the Suggested State Regulations for the Transportation of Radioactive Material, it is my responsibility to ensure that these suggested regulations for transportation represent the optimal regulatory position for all 50 states. Thus, I have offered to serve on the interregional working group.

DOE Portsmouth Site

It was announced on June 18, that a nuclear power plant would be built on that site. This will be the first new nuclear power plant since November 1987, when the Perry reactor started up. The new facility will house a single 1,600 megawatt reactor to be built jointly by Duke Power Company, French nuclear giant AREVA, USEC, and UniStar Nuclear Energy. The cost will be between \$5-10 billion dollars and take a decade or more before any electricity is produced. Construction jobs could average 1,400-1,800, with an estimated 400-700 permanent jobs needed to operate the plant.

At the same time, the project to build the American Centrifuge Plant, the new and improved uranium enrichment facility, was reported to be in serious financial jeopardy. The 2-billion dollar loan guarantee by DOE is yet to be granted, though applied for 10 months ago. Despite Energy Secretary Chu's promise in February to hasten the process of approving loan guarantees, DOE has only awarded one thus far. At risk are hundreds of construction jobs and an estimated 400 permanent jobs operating the plant.

New Committee Members

Midwestern Legislative Conference chair Senator Jay Emler (Kansas) appointed three legislators to the Midwestern committee. They are Representative Carl Holmes (Kansas), Senator LeRoy Loudon (Nebraska), and Representative James Soletski (Wisconsin). All three members will serve a two-year term, which expires at the end of 2010.

Future Meetings

A meeting of the Midwestern committee is scheduled for October 20-21, 2009. It is unclear at this point whether there will be any continuation of funding sufficient to support further committee meetings.

Each region is addressing this issue directly with DOE by letter. The Midwestern committee sent its letter to DOE on April 24. A response has not been received. The regional staff is working on a plan for next steps to follow in pursuit of continued funding and engagement with DOE. Assuming these efforts are successful, they will also be working on a plan for improving the region's working relationship with the DOE programs whose shipping activities affect the states.

Congressman Doc Hastings, representing Washington's 4th district, penned a letter to Energy Secretary Chu with a bipartisan group of 24 colleagues, requesting that DOE increase funding for the Yucca project to at least keep the licensing review of DOE's application on track.

A full copy of this report is available upon request.

After a brief break, Ms. Dragani assumed the position of Chair.

IV. New Business

A. Discussion of Proposed Radiological Emergency Planning (REP) Changes

The deadline for comments on the changes to the REP program is October 19, which is an extension of the date originally proposed. These are significant changes in a 30 year old program. Some of the major efforts are inclusion of the hostile action criteria, realistic scenarios, incorporation into the Homeland Security Exercise and Evaluation Program (HSEEP), evacuations (staged rather than keyhole) and backup for alert and notification. A summary of these documents was provided to the Working Group. If the Board allows, the Working Group will provide comments for their agency to Ms. O'Claire by August 31. The Working Group will then provide a white paper to the Board at the October 5 meeting for their action. FENOC noted that they are a part of an industry group who are responding to the rules and offered the opportunity for the state to participate through teleconference. This will also be discussed at the NEPAC meeting and comments will be shared there as well. Ms. Dragani asked what the timeline would be for implementation once guidance is finalized. Mr. Barker will get that information and report back at the October meeting. It was noted that the information must be in the plan within one year of the rule change although it does not have to be exercised.

B. NRC Oversight of FENOC Plants

Mr. Allan Barker was on hand to report for the NRC.

Davis-Besse Nuclear Power Plant

On April 23, 2009, the first quarter integrated inspection report for Davis-Besse was issued. Based on the results of this inspection, two NRC-identified findings and one self-revealed finding, all of very low safety significance were identified. The NRC-identified findings are as follows:

- A maintenance rule action plan stated that the 345 KV transformer deluge valve assemblies should be replaced in order to ensure continued high levels of reliability. However, the corrective actions in the action plan only listed the development of periodic maintenance for periodic replacement of the transformer deluge valve assemblies. The corrective actions did not address the susceptibility of the valve assemblies to inadvertently actuate the deluge system when mechanically agitated, as a result of a marginal design application.
- The failure to have qualitative or quantitative measures that would ensure specified corrective actions in department directives and business practices were actually being accomplished.
- In addition, a self-revealing finding was documented for the improper installation of insulation surrounding the main turbine bearing number two oil deflector caused the main turbine to be taken off-line due to smoking insulation. An

insulation blanket was blocking normal air flow used for cooling the oil deflector, causing oil to carbonize and clog the oil deflector screen.

Preliminary Notifications PNO-III-09-005 and 005A were issued June 26 and 29, respectively, on the Davis-Besse transitory alert due to electric device failure.

Public meeting to discuss NRC End-of-Cycle assessment of Davis-Besse performance for the 2008 calendar year is schedule for July 15, 2009, at 7:00 p.m. (EDT).

Location of Meeting: Davis-Besse Site
Energy Education Center
5501 North State Route 2
Oak Harbor, OH

Perry Nuclear Power Plant

On May 5, 2009, the first quarter integrated inspection report for Perry was issued. Based on the results of this inspection, two NRC-identified findings, four self-revealed findings and one licensee-identified violation, all of very low safety significance were identified. The NRC-identified findings are as follows:

- The failure to implement corrective action that was identified by an expert review panel, after the motor feed water pump did not meet established goals. Specifically, the purifier was not continuously run on the pump's lube oil sump to ensure the pump's functionality.
- The failure to perform required nondestructive testing on the reactor pressure vessel head strong back. Specifically, the licensee failed to conduct a complete nondestructive examination of a structural weld associated with the strong back lifting device.

In addition, four self-revealing findings were documented, 1) operators failing to conduct an adequate shift turnover, 2) improper control of maintenance resulting in unexpected water spray, 3) failure to perform an adequate survey (evaluation) to determine if respiratory protection equipment and/or engineering controls were necessary, and 4) radioactive material shipment transport manifest that did not document all applicable hazardous substances.

The licensee-identified violation was the failure to adhere to procedures and performed work on the 'B' residual heat removal (RHR) system when the procedures specified work on the 'A' RHR system. The 'B' RHR system was considered available as a backup system for spent fuel pool cooling at the time of the event.

Public meeting to discuss NRC End-of-Cycle assessment of Perry performance for the 2008 calendar year is scheduled for July 21, 2009, at 7:00 p.m. (EDT).

Location of Meeting: Holiday Inn Express Hotel and Suites LaMalfa
5783 Heisley Road
Mentor, OH 44060

Beaver Valley

On May 12, 2009, the first quarter integrated inspection report for Beaver Valley Units 1 and 2 was issued. Based on the results of this inspection, no findings of significance were identified. However, two licensee-identified violations were documented, and determined to be of very low safety significance. One was for an inadequate control room envelope boundary existing, due to a degraded (damper corrosion) normal intake damper. The second was the outer airlock to atmosphere equalizing valve being open, out of its normal position. Upon discovery of each condition, the licensee implemented corrective action to repair the damper and close the valve.

The full NRC report is available upon request.

C. Utility Reports

Mr. Rick Collings and Mr. Greg Halnon were present for FirstEnergy.

Beaver Valley

- a. Unit 1 Outage was successfully completed on schedule. Major work activities included those to improve system reliability.
- b. Unexpected Start of Aux Feedwater Pump/Actuation of Valid Signal that occurred on April 20, 2009 at 0114 hours during shutdown. After operator intervention, the plant received the proper response to feedwater isolation on the "B" steam generator.
- c. Circumferential indications on RCS Drain Pipe

During the Beaver Valley 1R19 refueling outage while performing planned ultrasonic examination of reactor coolant piping, two relevant indications were found in 2-inch RC-41 which is a drain/sample line off of the "A" hot leg. The affected piping segment was removed and replaced, and was sent to a metallurgical lab for examination. Metallurgical examination is required to confirm the cause; however, the probable cause is either thermal fatigue, stress corrosion cracking, or a manufacturing or fabrication flaw.

- d. Damage on Containment Liner

During the refueling outage, visual examination of the containment liner suspect area was identified at the 738" elevation. This area was approximately 3" inches in diameter and exhibited blistered paint and protruding rust product. The cleaning activity uncovered a rectangular hole approximately 1" (horizontal) x 3/8" (vertical), that appeared to be through the liner plate. The liner plate nominal thickness in this area is 0.375". UT thickness measurements were obtained around the hole to determine the extent of the thinning. The measurements showed that the thinning was within approximately 10 square inches (i.e., 4" x

2.5”), outside of which the liner returned to nominal thickness. The area was repaired and found satisfactory during testing.

e. Auto Actuation of RPS, ECCS, EDG by Invalid Signal occurred on May 6 while Unit 1 was shutdown for a refueling outage. Evaluation concluded that all systems responded as designed.

f. Unusual Event on June 18, 2009

At 2139, on June 18, 2009, an Unusual Event was declared based on EPP Tab 4.1, Fire in the ERF Substation not extinguished within 15 minutes from the time of control room notification or verification of control room alarm. The Fire Brigade was able to report that there were no signs of fire in the ERF Substation. At 2236, the Unusual Event was terminated.

g. Rerack of Spent Fuel

Spent fuel storage space in the Unit 2 Spent Fuel Pool is limited and the pool needs reracked before 2R15 (Spring 2011). After 2R15, “Full core off load capability” would be lost. A complete spent fuel storage rack replacement will increase the total number of fuel storage cells from 1,088 to 1,690 cells and will provide adequate storage capacity until approximately 2024, when dry cask storage will be required.

Davis-Besse Nuclear Power Station

May 12, 2009 Evaluated Exercise

The Davis-Besse Emergency Response Organization (ERO) together with the offsite response organizations successfully demonstrated the ability to protect the health and safety of the public during the biennial ERO Evaluated exercise on May 12. All onsite emergency response facilities were involved. Offsite participation included full participation of Ottawa and Lucas counties and partial participation from the State of Ohio. Overall, more than 400 players were involved in the evaluated exercise.

Outage at Davis-Besse to improve Operating Margin

Davis-Besse successfully completed a maintenance outage on April 21, 2009. The purpose was to strengthen the plant’s ability to continue to operate safely and reliably.

Inadvertent Activation of EPZ Sirens (April 30)

On the morning of April 30, 2009, six Bay Township (Zone 2), were inadvertently activated for a 3 minute alert. Troubleshooting was commenced on the radio console computer system. Configuration files and error logs were found to be corrupted and were reloaded/reinitialized and the radio consoles were returned to service.

June 25, 2009 Alert Due to Explosion in the Main Switchyard (EAL 7.D.2)

On June 25, at 0049 hours, the Davis-Besse Control Room received indications that 1 of the 2 switchyard buses was de-energized. A subsequent walkdown of the switchyard determined that a potential transformer that monitors voltage on the 'B' phase of the 'J' bus was destroyed. The isolation of the 'J' bus results in the #1 startup transformer also being de-energized, which placed the station in a 72 hours Limiting Condition of Operation per Technical Specification 3.8.1.

The catastrophic failure of the Constant Current Potential Device (CCPD) on 'J' bus caused a fire in the switchyard. Offsite assistance was requested, they responded to the station, but the station fire brigade extinguished the fire prior to their arrival.

The severity of the CCPD failure was not initially recognized because of the night time conditions and minimal lighting in the area. After daylight examination of the location of the event, it was determined that the failure of the CCPD should have been classified as an Alert due to an explosion affecting plant operation under EAL 7.D.2. Davis-Besse made the notification after the fact.

The event occurred outside the protected area, did not involve any radioactive systems and no personnel injuries occurred as a result of this event. The 'J' bus was returned to service and declared operable at 23:05 hours on June 26.

Perry

The Perry Nuclear Power Plant refueling outage was conducted from February 23 to May 12. In addition to refueling, the primary focus was to improve equipment reliability.

Residual Heat Removal Pump Trip

The plant experienced a residual heat removal pump trip on April 27 while the plant was shutdown for a refueling outage. The NRC was notified; however, the event notification was subsequently retracted. The root problem appeared to be a blown fuse. The blown fuse was replaced and the residual heat removal pump was returned to service.

Reactor Shutdown (June 21)

At approximately 1755 on June 21, the Perry Plant experienced a Main Turbine Trip/Reactor SCRAM due to a Moisture Separator Reheater (MSR) 1B, high level signal. At the time of the event, the plant was in Mode 1 at 100 percent power. All control rods inserted into the core and no Emergency Core Systems were required or utilized to respond to the event, Reactor coolant level was maintained in its normal band by the feedwater system and decay heat was removed by the main condenser. The plant maintained a normal electrical line-up with all three

Emergency Diesel Generators operable and available if needed. No safety relief valves lifted during the event.

The turbine trip and subsequent reactor trip was the result of the three upper micro switches being closed to energize the MSR high level trip relays.

The three MSR 1B upper micro switches were found incorrectly set up. The micro switches were successfully calibrated and functionally check satisfactorily. A root cause investigation is in progress to determine the underlying causes(s) for the improper alignment of the micro switches following replacement in 1R12.

The plant restarted with the generator synchronizing to the grid on June 26th.

Fleet Report

Comprehensive Review Results

The final Integrated Protective Measurer Analysis (IPMA) reports for Beaver Valley, Davis-Besse and Perry follow the same format. The reports are as a result of the Comprehensive Review process directed by the Homeland Security Act of 2002, Homeland Security Presidential Directive 7, "Critical Infrastructure Identification, Prioritization and Protection: and the Interim National Infrastructure Protection Plan of February 2005.

Levels of classification of information contained the in the reports:

"U" – Undesignated or uncontrolled information (NOT SGI) and no markings are required by the guide

"2.390" – Information withheld from the public release and protection by the Freedom of Information Action

"SGI" – Safeguards information

Information provided in this debrief is classified as "U"

The report form is

- 5.2 Site Emergency Preparedness Program
- 5.3 (Site name) Emergency Response Organization
- 5.4 Site Fire Fighting Capability

- 6.3 Community Emergency Response Posture
 - 6.3.1 Emergency Planning Zone
 - 6.3.2 State and Local Emergency Management Organization

- 6.4 Fire Fighting
 - 6.4.1 Additional Fire Fighting Resources

- 6.5 Emergency Medical Services
 - 6.5.1 Hospitals
 - 6.5.11 Local Emergency Response Agreements

Each report documents existing programs and contains some detail on the capabilities of the various organizations. Discussions include amount and types of fire fighting capabilities, various communication systems and the level and quality of training of personnel. Areas for improvement are contained in the reports but are contained in the classified sections. FENOC security is working to extract security related information to allow a more detailed review of the results. FENOC Emergency Preparedness will continue to review the results as it becomes available including obtaining Safeguards clearance as necessary.

A full copy of the FENOC report is available upon request.

Mr. Halnon provided a summary of the training on regulatory sensitivity. All training had been completed in 2007 and 2008. Each year, the organization is re-assessed to see if any new individuals would benefit from the training. If so, the training is either offered in a classroom setting or one-on-one. In addition, the NRC has closed out, through inspection, any concerns dealing with the regulatory sensitivity resulting from the Demand For Information.

V. MISCELLANEOUS

The next meeting of the Utility Radiological Safety Board will be October 5.

VI. ADJOURNMENT

Ms. Dragani asked for a motion to adjourn.

DATE

UTILITY RADIOLOGICAL SAFETY BOARD