

**UTILITY RADIOLOGICAL SAFETY BOARD OF OHIO
MEETING MINUTES
OCTOBER 12, 2010**

Ms. Nancy Dragani called to order the October 12, 2010 meeting of the Utility Radiological Safety Board of Ohio at 1:00 p.m.

GUESTS: Ms. Terri Gerhardt, Assistant Chief, Division of Food Safety, at the Ohio Department of Agriculture was introduced by Chuck Kirchner.
Mr. Kenneth Barnhart, Ohio Department of Health, who works with Mr. Steve Helmer, was introduced.
Mr. Harlan Hanson, with the Perry Nuclear Power Plant, was introduced.
Mr. James Mehl, with the Ohio Environmental Protection Agency, was sitting in for Ms. Cindy Hafner as the Ohio EPA board member, until her arrival at 1:04 p.m.

The first order of business from the agenda, was the roll call taken by the URSB Secretary, Martha Underwood.

I. ROLL CALL

EMERGENCY MANAGEMENT AGENCY	MS. NANCY DRAGANI
DEPARTMENT OF HEALTH	MR. ROBERT OWEN
DEPARTMENT OF AGRICULTURE	MR. CHUCK KIRCHNER
PUBLIC UTILITIES COMMISSION	MR. DANIEL FISHER
ENVIRONMENTAL PROTECTION AGENCY	MR. JAMES MEHL, UNTIL
	MS. CINDY HAFNER ARRIVED
DEPARTMENT OF COMMERCE	MR. DEAN JAGGER

A quorum was declared.

II. READING OF THE JULY 12, 2010 MINUTES (ADOPTED)

The Board dispensed with reading of the July 12, 2010 minutes. Ms. Dragani asked for any additions, corrections or deletions to the minutes. Ms. Dragani asked for a motion to approve the minutes. Mr. Robert Owen of the Ohio Department of Health (ODH) moved to adopt the minutes and Mr. Chuck Kirchner, of the Ohio Department of Agriculture (ODA) seconded. The motion was carried.

Ms. Cindy Hafner, board member, from the Ohio Environmental Protection Agency, entered at 1:04 p.m.

III. OLD BUSINESS

A. Update of the URSB Initiatives.

Ms. Carol O'Claire, Ohio EMA, reviewed the URSB Initiatives.

BEAVER VALLEY FULL PARTICIPATION EXERCISE

FEMA V identified three state findings during the April 20, 2010 BVPS full participation exercise. The state received a Deficiency and two Area Requiring Corrective Action (ARCAs) during the exercise. The state received the Deficiency under Criterion 4.a.2, "field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure." Two of the three FMTs did not receive the order to take KI from the FMT Coordinator. The state received an ARCA under Criterion 4.a.3, "field teams ambient radiation readings and radioiodine and particulate samples collected." One FMT incorrectly wrote the readings onto the data form. The state received an ARCA under Criterion 2.b.2 "appropriate protective actions based on offsite dose projections." The Assessment Room incurred difficulties in the process of running dose projections.

The Deficiency under Criterion 4.a.2 was re-demonstrated on July 22, 2010 along with the ARCA under Criterion 4.a.3 at the Ohio EMA EOC/JDF facility. The final report showed that the ARCA and deficiency were cleared. The ARCA under Criterion 2.b.2 was successfully re-demonstrated during the September 28, 2010, PNPP exercise.

PERRY NUCLEAR POWER PLANT PARTIAL PARTICIPATION EXERCISE

The 2010 PNPP partial participation exercise was conducted on September 28, 2010. Preliminary findings include one ARCA for the state of Ohio under Criterion 5.b.1, "Offsite Response Organizations provide accurate emergency information and instructions to the public and the news media in a timely manner." The counties of Lake, Ashtabula, and Geauga did not receive any FEMA findings.

AFTER ACTION PLAN ACTIVITIES (EMA/ODA/ODH/EPA)

Individual agencies continue to address issues noted from the previous nuclear power plant exercises including revisions to the state REP plan. Where appropriate the working group combines repeat issues or issues of a similar nature into one action item to be addressed. After Action issues are being addressed by e-mail with periodic meetings as necessary. After Action items from the September 2010 Perry Exercise critique will be added to the After Action Matrix. IZRRAG After Actions items are being captured separately.

IZRRAG ACTIVITIES (ODH/EMA/EPA/ODA)

IZRRAG training and drills will continue to be conducted annually. IZRRAG training will be conducted on October 18, 2010. An IZRRAG drill to include the Field Team Center/Sample Screening Point activities will be conducted on October 27, 2010. An IZRRAG Tabletop drill will be conducted on November 10, 2010. The next evaluated ingestion exercise for the State will be in 2012 with the Perry plant.

REACTOR OVERSIGHT PROGRAM (EMA/ODH)

This is an NRC program used to provide continuous oversight of nuclear power plants to verify that each plant is operated in accordance with NRC rules and regulations. Key features of the

program are a risk-informed regulatory framework, risk-informed inspections, a significance determination process to evaluate inspection findings, performance indicators, a streamlined assessment process, and more clearly defined actions the NRC will take for plants based on their performance. The URSB will continue to monitor this program especially as it relates to emergency preparedness.

a. DAVIS-BESSE NUCLEAR POWER STATION (DBNPS):

Davis-Besse remains in column two of the NRC Reactor Oversight Matrix. The placement was due to one white finding as described in NRC Inspection Report No. 05000346/2010502, regarding the June 25, 2009 explosion occurring in the switch yard.

Davis-Besse identified cracking in 24 of 69 Control Rod Drive Mechanisms during their 16th refueling outage. Repairs have been made and the plant synchronized to the grid on June 29, 2010. The state participated with the NRC in weekly conference calls that ended on June 30, 2010. The public Special Inspection Exit Meeting was held September 9, 2010 by the NRC. Representatives of the URSB member agencies were in attendance.

Davis-Besse has submitted an application to the NRC for a 20-year license renewal.

b. BEAVER VALLEY NUCLEAR POWER STATION

Beaver Valley continues to be in column one of the NRC Reactor Oversight Matrix.

c. PERRY NUCLEAR POWER PLANT

The Perry plant continues to be in column one of the NRC Reactor Oversight Matrix.

TECHNOLOGY (EMA/ODH/EPA)

The Working Group had previously determined the need for consistent plant data in the Assessment Room. FENOC attended the Beaver Valley 2006 exercise to evaluate state dose assessment needs. Beaver Valley has real time e-data available, but currently there is no simulator e-data link from Beaver Valley to the state EOC. The Beaver Valley simulator e-data link was projected to be operational before the exercise dry run in March 2010, but was unavailable. The e-data system was successfully utilized during the 2010 dry run and evaluated exercise with the PNPP. The e-data system has not been completed for the Davis-Besse plant.

Ten piezoelectric dosimeter chargers will be purchased in SFY 2011. Additional instrumentation will be purchased once the next grant agreement with FENOC is negotiated.

FMT air sampling equipment from Radeco Corporation has been received and will replace the older air sampling units. Training and incorporation of the new air samplers into the FMT procedures are currently in process.

The Instrument Committee, consisting of members from FENOC, ODH, and Ohio EMA, formed to evaluate dosimetry and instrumentation supplied to emergency workers will resume meeting in

the near future. The committee has evaluated two different electronic dosimeters and is in the process of scheduling conference calls to discuss the evaluation of the units. The committee will next discuss and evaluate deployable monitoring systems similar to Pennsylvania's equipment. This committee will provide recommendations to the NEPAC to determine a long term equipment plan.

DHS COMPREHENSIVE REVIEW (EMA/ODH)

The comprehensive reviews for Perry, Beaver Valley, and Davis-Besse were completed. The URSB Working Group has received a redacted report and is awaiting the final report. A briefing from FENOC is anticipated at the end of today's meeting.

STATE DOSE ASSESSMENT (ODH/EMA)

In 2007, a working group was initiated for the evaluation of available dose assessment software. The last meeting was conducted on August 26, 2009 to discuss a common dose assessment program. More meetings are anticipated in the future to further discuss development of the program.

FENOC is still evaluating possible dose assessment program options including RASCAL or an in-house program. ODH and EMA are evaluating RASCAL 4.0. Meetings with representatives of each of the plants dose assessment staffs are needed to determine if the plants can provide the data to successfully run RASCAL.

KI (ODH/EMA)

All current issues have been addressed for public KI. The emergency worker KI will be the next issue to be addressed. Additional KI bags and inserts were provided for northeast Ohio distribution in late August 2010.

REP GUIDANCE AND NRC RULEMAKING (ALL)

The NRC and FEMA released draft documents for public comment regarding radiological emergency preparedness. The comment period closed October 19, 2009. The Board submitted comments to FEMA for consideration.

NUREG-0654 Supplement 3 draft was reviewed by the Working Group. Comments were submitted prior to the May 24, 2010 deadline.

Efforts continue with the improvement of the Ohio Plan for Response to Radiation Emergencies at Commercial Nuclear Power Plants with regard to NIMS compliance. Ohio EMA will continue to revise the plan in accordance with NIMS requirements as inconsistencies are discovered. No formal Federal guidance has been issued to address the inconsistencies between NUREG-0654 and NIMS. The 2010 REP Plan was revised and submitted to FEMA and has received approval. The REP plan has been distributed to affected parties.

The Working Group has been advised that additional ICS training is needed to ensure EOC staff meets NIMS criteria. The Working Group agencies have scheduled training opportunities and are currently under way.

Hostile Action items will be phased into biennial exercises when the new NRC rules are approved.

The Working Group will continue to monitor the status of the draft documents.

PROCEDURAL REVIEW (ALL)

The Working Group will review procedures to ensure consistency among member agencies.

The next Davis-Besse exercise will be in May 2011.

END OF INITIATIVES

B. Midwestern Committee Report

Mr. Robert Owen, ODH, stated that this would be his last report to the Board because he was retiring at the end of December.

Mr. Robert Owen, ODH, updated the Board regarding the Midwestern Committee report.

Information and Communications Work Group

This group reviewed a new draft Q&A booklet on incident response for radioactive material transportation being produced jointly by FEMA and DOE. The initial draft was reviewed in November 2009. Final revisions will be completed soon.

National Transportation Stakeholders Forum (NTSIF) Planning Committee

The committee has been holding a series of conference calls as a follow-up on the May meeting and to discuss tasks for next year. Ad hoc work groups are being formed to address some of the issues raised at the first meeting of the NTSF. The location of the next meeting has not been determined, though the Western Governors Association has offered to host it. Tim Runyon of Illinois will be serving as the Midwestern representative on this committee.

Planning Guide Review

The guide has been completed and copies of the guide have been distributed to all states. Copies of the guide are being provided to board members and anyone else interested in receiving a copy.

Reciprocal Rail Inspections

The work group continues to work on developing a set of inspection forms and procedures for inspecting rail shipments of high-level waste and spent nuclear fuel. This spring, several FRA-certified state inspectors in Pennsylvania carried out a pilot test of the proposed inspection forms. Another pilot test is being planned for Ohio.

Strategic Planning Work Group

In July the group held a conference call to discuss ideas for expanding the region's activities to address issues involving spent fuel storage, disposal, and reprocessing. The group brainstormed about ideas for specific projects the region could undertake, including the development of recommendations for an improved site-selection process. The group also discussed the idea of sponsoring a nuclear issues workshop for state legislators from the region, with field trips to operating nuclear facilities. Work group members agreed that the region should evaluate the committee structure and membership to determine whether my changes are needed before transforming the transportation project.

NRC Rulemaking Review

The committee submitted comments on NRC's proposed rulemaking on the physical protection of byproduct material. Specifically, the committee recommended holding additional workshops near NRC regional offices in order to enhance public participation, verification of the transferee's license, a timeframe of two to four hours for initiating an investigation of theft or diversion of radioactive material covered by the rulemaking, clarification of similar timelines for notification of receipt of material and launching an investigation, tribal notifications required by this proposed rulemaking should be consistent with the rulemaking under consideration for irradiated reactor fuel, and that the requirements for transshipment of material be identical with those for domestic shipments.

Yucca Mountain Update

The Blue Ribbon Commission (BRC) has held a number of meetings across the country and has heard from a number of stakeholders groups. The recurring theme from local stakeholders has been continued support for a central repository. There were other concerns expressed about the adequacy of environmental cleanup at DOE sites, if waste being produced there has nowhere to go. The BRC's Subcommittee on Transportation and Storage has focused on issues specific to shutdown of reactors on decommissioned sites, of which there are nine around the country. It was emphasized by the Northeast Task Force at the BRC meeting in Maine that here needed to be continued collaboration between DOE and the states in planning for the eventual transportation of commercial spent fuel, regardless of the destination. The NCSL advocated for voluntary siting of regional storage facilities that involved state and local government and included financial incentives. As a side note, the NRC proposed rulemaking in October 2008, would address two of the five findings related to waste confidence. Under the proposed rulemaking, the NRC would change its waste confidence findings to say that a geologic repository will be available 50-60 years after the life of existing nuclear power plants, whereas the previous finding was that a repository would be available by 2025. In addition, the findings would be revised to say that spent nuclear fuel can be stored safely on-site at nuclear reactors for 60 years.

TRANSCOM Super User Training

Ohio EMA will host the one-day "Eastern" Regional Super User Training on October 26. The training is delivered by the TRANSCOM Communication Center staff. Upon completion of the training, attendees are qualified to provide general user training to others.

Future Meeting

The next meeting of the committee will be in Milwaukee, Wisconsin on December 7-8.

END OF REPORT

Ms. Carol O'Claire asked Mr. Robert Owen who would be taking his place when he retires.

Mr. Robert Owen stated that he did not know. His last day will be December 23; but, officially, his retirement date is December 31.

URSB FY2010 Annual Report

Ms. Nancy Dragani asked about the Annual Report. It was submitted.

Ms. Carol O'Claire stated that the annual report has been emailed to everybody at this Board as of this date, October 12, 2010.

Ms. Carol O'Claire asked for approval of that verbiage in the URSB FY2010 Annual Report as provided to the Board via email.

Ms. Dragani asked for a motion to approve the entire URSB FY2010 Annual Report. Motion by Mr. Chuck Kirchner, of the Ohio Department of Agriculture (ODA), to approve the URSB FY2010 Annual Report; Mr. Robert Owen of the Ohio Department of Health (ODH), seconded. The motion was carried.

IV. NEW BUSINESS

- A.** Mr. Allan Barker, NRC Region III, updated the Board on the oversight of the FENOC plants.

Davis-Besse Nuclear Power Plant

In the September 1, 2010, assessment letter, plant performance was within the Regulatory Response column of the NRC Action Matrix. This was based on one finding associated with the Emergency Preparedness Cornerstone being classified as having low-to-moderate safety significance (White). This White finding, from the fourth quarter of 2009, involved the failure to classify an actual Alert in a timely manner during a June 2009 switchyard event. In addition to a supplemental inspection for the White finding, the NRC will conduct reactor oversight process baseline inspections.

On March 29, 2010, the NRC was notified of the plant's readiness for the NRC to conduct a supplemental inspection to review the actions taken to address the White finding. The supplemental inspection was performed during the week of August 16, 2010. The issuance of this inspection report is in NRC management review.

NRC Region III management and the NRC special inspection team held a public exit meeting on September 9, 2010, on the March 2010 Davis-Besse reactor vessel head flaw indications that were identified. The issuance of this inspection report is in NRC management review.

Selected upcoming inspections from the 2010/2011 inspection schedule were identified.

The Davis-Besse License Renewal application was received by the NRC on August 30, 2010. The application is in an initial acceptance review by the NRC. The next agency process step will be to publish a Federal Register Notice on the application.

Perry Nuclear Power Plant

In the September 1, 2010, assessment letter, plant performance was within the Licensee Response column of the NRC Action Matrix. This was based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, the NRC plans to conduct reactor oversight process baseline inspections.

In the 2009 annual assessment letter, dated March 3, 2010, the NRC advised Perry of a substantive cross-cutting issue in the area of Human Performance with cross-cutting themes in the areas of work planning, human error prevention techniques, and work oversight.

During this assessment period, a cross-cutting theme in the human performance area was once again identified with a cross-cutting aspect of work planning. The NRC remains concerned about whether the development of causal evaluations and implementation of corrective actions can be effective in demonstrating sustainable performance in this area. Based on the identification of a human performance cross-cutting theme, and because of continued NRC concerns for the human performance area, the human performance substantive cross-cutting issue will remain open.

During this assessment period, the number of findings with cross-cutting aspects of human error prevention techniques and work oversight were reduced to below the threshold for a cross-cutting theme. While the NRC will continue to monitor the human performance area as a whole, the human error prevention techniques and work oversight cross-cutting themes are closed.

This mid-cycle assessment letter is the sixth consecutive assessment letter identifying a substantive cross-cutting issue in the human performance area, which was initially opened in the March 3, 2008, end-of-cycle assessment letter. Based on the results of the most recent assessment period, the actions taken in response to continued human performance errors have not demonstrated sufficient progress in addressing the issue. Perry's effectiveness at implementing sustainable corrective actions to address this substantive cross-cutting issue will be reviewed during the NRC biennial Problem Identification and Resolution (PI&R) inspection scheduled for November 2010.

In addition, the 2009 annual assessment letter also advised Perry of a substantive cross-cutting issue in the area of PI&R with a cross-cutting theme in the area of corrective action program evaluation/extent of condition. Based on actions taken by Perry, and because no cross-cutting

theme was identified in the PI&R cross-cutting area, the PI&R substantive cross-cutting issue is closed.

Selected upcoming inspections from the 2010/2011 inspection schedule were identified.

Beaver Valley

In the September 1, 2010, assessment letter, plant performance was within the Licensee Response column of the NRC Action Matrix. This was based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, the NRC plans to conduct reactor oversight process baseline inspections.

Selected upcoming inspections from the 2010/2011 inspection schedule were identified.

END OF REPORT

B. Resolution 10-01 – Thanking Robert Owen for his URSB Service

Ms. Nancy Dragani stated that this was an opportunity and a special time. She asked Mr. Robert Owen to please stand.

Ms. Carol O'Claire read the Resolution thanking Mr. Robert Owen for his 20 years of service with his retirement scheduled for December 31, 2010. The URSB Board members expressed their appreciation to Mr. Owen.

Mr. Robert Owen stated that they have a great partnership here with one common goal for all citizens of Ohio for nuclear safety.

BREAK recess at 2:00 p.m.

Meeting reconvened at 2:15 p.m.

Ms. Nancy Dragani reopened the meeting at 2:15 p.m.

FENOC REPORT

Beaver Valley Power Station Unit 1 Outage and RHR emergent issue

RESIDUAL HEAT REMOVAL SYSTEM PIPING LEAK

Approximately five hours after Beaver Valley Power Station Unit No. 1 was shutdown at 0011 hours [EDT on 10/02/10] to enter a scheduled refueling outage, an approximate 5 drops per minute leak was identified from a three quarter inch drain line valve on the Residual Heat Removal (RHR) System inside containment. This leak is downstream of the two series RHR isolation valves on a pipe which connects to both trains of RHR. The actual location of the leak on the valve was not immediately evident. An evaluation was requested. At 1011 hours, the evaluation reported

a 270 degree circumferential crack in the socket weld on the RHR side of the valve. Without reasonable assurance of RHR System operability, both trains of RHR were declared inoperable. Actions to address this condition are being pursued. The NRC Resident Inspector was notified. T.S. Action 3.4.7 requires that efforts be immediately initiated to restore RHR as soon as possible.

BVPS identified a success path for the leaking Unit 1 Residual Heat Removal system (1RH-200) drain line valve. The temporary clamping device was removed and a qualified clamp installed on the valve to maintain compression around the crack area preventing further crack propagation, minimizing the leak and maintaining structural integrity while the Residual Heat Removal (RHR) system remains in service. The clamping device was designed and installed in accordance with American Society of Mechanical Engineers (ASME) approved code case requirements, including seismic requirements. The outage schedule is less than 24 hours behind the original estimated schedule as of 1100 hours on 10/06/10.

Other outage work and status as of 10/06/10:

Final repairs and inspections to the Unit 1 Polar Crane and rails are expected to wrap-up later today. In addition to completing a number of electrical and mechanical preventive maintenance work orders crews installed a temporary, 480-volt, 200-amp back-up power cable to ensure uninterrupted availability of the crane during critical outage evolutions. Crews also replaced the existing set of collector shoes and installed a second set of collector shoes to increase reliability. The Polar Crane is required to support outage-critical work such as lifting, removal and reinstallation of the Missile Shield, Reactor Head, upper internals and to support refueling operations. Replacement of the entire annular rail system is currently scheduled for the 1R21 refueling outage in 2012.

With the Polar Crane and RHR-200 drain work completed, we now need to focus on executing our original outage plan and schedule. While the RHR drain valve issue and work on the Polar Crane delayed some work, we were able to pull some work forward in the schedule. Other activities, such as Reactor Coolant System clean-up, were completed in less time than scheduled. All of the original, planned activity durations still fit within a 23-day outage schedule. Original dose estimates are on track as well as other work related to reactor disassembly and fuel movement preparations. Upcoming significant work includes Reactor Nozzle insulation removal and preparations for Reactor Coolant Pump "B" motor replacement.

High Head Safety Injection system pump loss:

At 1345 hours on 8/26/10 Ultrasonic Testing provided preliminary indications that the 6" suction header was full of water and an air void did exist in the 8" suction header with indeterminate size that required System Engineering calculation support. Operations commenced additional monitoring for cavitation of the running charging pump with none identified. Operations then vented the 8" suction header multiple times per procedure with the final vent a solid stream of water. This action was complete at ~1415 hours on the same day. At 1649 hours on 8/26/10, the calculated results of the UT was provided to Operations by System Engineering indicating that an air void existed in the Charging Pump 8" Suction header that was in excess of the Acceptance Criteria of the controlling procedure. Both trains of High Head Safety Injection pumps were declared Inoperable but Available. Additional venting of the 6" Charging Pump suction header revealed it remained full of water. Additional venting of the 8" Charging Pump suction header

revealed additional air pockets. The 8" header was then vented multiple times, with a short delay in between each venting, until no air was identified. Follow up UT on both Charging Pump Suction headers reveal no voids present. Both trains of High Head Safety Injection were then returned to Operable status.

Spent Fuel Re-Rack Project

This project is currently in the engineering phase with work scheduled to begin in Nov. 2010 with installation of one rack in the dry cask storage pit (temporary pit used prior to new fuel loading into the Spent Fuel Pool). An additional 14 racks are to be installed in the Spent Fuel Pool during 2012. No work is currently scheduled for 2011.

Davis-Besse Nuclear Power Station

License renewal License Renewal

License Renewal Application (LRA) was submitted to NRC on August 30. It is expected that the NRC will review to confirm "sufficient for docketing" by end of October. Tentative NRC License Renewal Audit Plans include:

- Environmental Audit planned for week of October 25
- Environmental Public Meeting planned for week of November 1st
- Scoping and Screening Audit planned for week of December 6th with the remaining License Renewal Audits and Inspections to occur in 2011

It is expected that the NRC will begin sending License Renewal "requests for additional information" (RAIs) before the end of the 2010. FENOC is planning strong site support for successful License Renewal audits and inspection to ensure any issues are responded to and resolved promptly.

Update Groundwater Sample Results

A more frequent sampling program instituted earlier this year for monitoring wells identifying and trending the presence of tritium in ground water at Davis-Besse has shown that isotope levels are continuing to lower. Since the last update, tritium levels in the wells have declined significantly. Sampling in June showed that, although activity in all six wells remained greater than 2,000 pCi/l, each had lower levels than the previous month's results. In July, all readings were once again lower, and only four of the six wells were greater than 2,000 pCi/l. For the August samples, only three of the six wells were greater than the reporting limit and the highest reading was 2,260 pCi/l. The September samples were stable for four of the wells. One well was slightly lower and one well was slightly higher than the previous month. The highest reading for September was 2,311 pCi/l. Tritium is a radioactive isotope of hydrogen that emits a very weak beta particle. It is a naturally occurring substance found in the atmosphere as well as a byproduct of nuclear reactions. The industry, working with NEI, has agreed to voluntarily monitor ground water beneath nuclear plants for tritium and to provide information to the appropriate officials at a threshold of 2,000 pCi/l. The NEI initiative requires sampling GPI wells on a six-month frequency. The tritium PS/DM team is continuing to evaluate sampling results on a month-by-month basis.

Special Inspection—Reactor Head

On September 8, 2010, the Nuclear Regulatory Commission (NRC) Special Inspection Team (SIT) Public Exit meeting was held to provide the preliminary inspection results regarding FENOC's identification of flaws in Davis-Besse's Reactor Pressure Vessel Head Control Rod Drive Mechanisms (CRDMs) during the last outage and the process used by FENOC to modify. It was emphasized that FENOC demonstrated safety-focused decision-making when electing to replace the Reactor Head in 2011 rather than 2014, as initially planned. It was stated that DB plant safety was not compromised and that the 24 completed modifications restored the structural integrity of the Reactor Head, allowing it to return to service. The team also noted that NRC requirements for CRDM examinations proved successful – early identification of the flaws occurred before any significant degradation of the head.

The NRC SIT credited its rigorous inspection process as providing assurance that FENOC's modifications to the Reactor Head were in compliance with NRC requirements. Following is an outline of the areas the team targeted during the five-month inspection period:

- observed head examinations and repair process
- reviewed personnel qualifications, procedures, historical video and records
- FENOC root cause team investigation and the FENOC analysis for continued service of the head.

The team noted three potential green non-cited violations to:

- The liquid dye penetrant test procedure for nozzle repairs.
- The procedure for viewing the liquid dye penetrant testing on nozzle #61 repair weld.
- The weld repair procedure applied on nozzle #4.

All three items were corrected prior to placing the head in service and were considered to be of very low safety significance. The team also noted cross-cutting aspects of these violations related to FENOC's oversight of contractor work activities and Human Performance. The site initiated condition reports to document the issues and will develop corrective actions.

Perry Nuclear Power Plant

September 28 Exercise Results (preliminary)

i) On site

Performance in the 2010 evaluated exercise demonstrated the Perry can successfully implement its Emergency Plan to protect the public in the event of a radiological emergency. There were no significant issues or findings identified in the inspection. The exercise was successful and received a critical review of performance by the licensee.

ii) Off site

(1) State of Ohio – all objectives selected were satisfactorily demonstrated

- The Area Requiring Corrective Action (ARCA) from the Beaver Valley exercise for the State of Ohio was successfully demonstrated and closed.
- An ARCA was debriefed by FEMA with OEMA.

(2) Lake County – all 23 objectives selected were satisfactorily demonstrated.

- An ARCA was identified and successfully re-demonstrated at the Tri-Point Hospital associated with zeroing of pocket dosimeters.
- An ARCA was identified and successfully re-demonstrated associated with law enforcement's understanding and use of KI.
- Two Planning Issues were debriefed.

(3) Geauga County – all 15 objectives selected were satisfactorily demonstrated.

- An ARCA was identified and successfully re-demonstrated associated with a school Superintendent's familiarity with the issuance of emergency worker dosimetry.

(4) Ashtabula – all 19 objectives selected were satisfactorily demonstrated.

- One Planning Issue was debriefed.

Status of Cross-Cutting Areas of Human Performance and Problem Identification

The current PNPP status in regards to the Nuclear Regulatory Commission (NRC) Reactor Oversight Process (ROP) Cross-Cutting Areas is as follows:

"The PNPP operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green)."

Human Performance – Status is open

For the assessment period from July 1, 2009, through June 30, 2010, the total number of inspection findings with documented cross-cutting aspects decreased from 19 to 14. One cross-cutting theme is currently identified in the human performance area with four findings in H.3(a) (work control - planning).

The mid-cycle assessment letter was the sixth consecutive assessment letter identifying a substantive cross-cutting issue in the human performance area. Although the total number of findings with documented cross cutting aspects in human performance decreased, a cross-cutting theme in the human performance area was once again identified based on four findings with a cross-cutting aspect of work planning (H.3(a)). The NRC remains concerned about whether the development of causal evaluations and implementation of corrective actions can be effective in demonstrating sustainable performance in this area. The NRC expressed a continuing concern with the scope of PNPP efforts and progress in addressing this cross-cutting area based on the identification of a human performance cross-cutting theme and because of continued NRC concerns with PNPP's performance issues in the human performance area. Consequently, the human performance substantive cross cutting issue remains open. It will remain open until corrective actions have

demonstrated positive, sustainable improvements in the area and have resulted in a reduction in the number of findings in the area.

Based on the results of the most recent assessment period, the actions taken in response to continued human performance errors have not demonstrated sufficient progress in addressing the issue. PNPP's effectiveness at implementing sustainable corrective actions to address this substantive cross-cutting issue will be reviewed during the NRC's biennial Problem Identification and Resolution inspection in November 2010.

At this time, the May 2010, independent assessment of safety culture will also be reviewed. During this assessment period, the number of findings with cross-cutting aspects of human error prevention techniques (H.4(a)) and work oversight (H.4(c)) were reduced to below the threshold for a cross-cutting theme. The NRC reviewed the PNPP corrective actions to address these cross-cutting themes and believe that they have resulted in positive improvement and, if properly implemented, can provide sustained, improved performance. While the NRC will continue to monitor the human performance area as a whole, the H.4(a) and H.4(c) cross-cutting themes are closed.

Problem Identification and Resolution (PI&R) – Status is closed

In the NRC's 2009 annual assessment letter, the NRC advised PNPP of a substantive cross-cutting issue in the area of Problem Identification and Resolution with a cross-cutting theme in the area of corrective action program evaluation/extent of condition (P.1(c)). They stated in the mid-cycle assessment that they noted positive, sustainable improvement in the Problem Identification and Resolution area. For this assessment period, one finding was identified with a cross-cutting aspect in the Problem Identification and Resolution area and no findings with a cross-cutting aspect of P.1(c). Based on the actions PNPP has taken to decrease the number of findings in the P.1(c) aspect, and because no cross-cutting theme was identified in the Problem Identification and Resolution cross-cutting area, the NRC closed the Problem Identification and Resolution substantive cross-cutting issue.

Level IV Violation: Radiation Protection/Portal Monitor Alarm

Summary

The NRC issued a Severity Level IV Notice of Violation to PNPP on July 30, 2010. The violation involved a March 15, 2009, incident where a contract radiation protection technician disregarded a portal monitor contamination alarm and exited the PNPP site without authorization from Radiation Protection supervision. The violation was cited and a response was requested because it was a willful violation and because PNPP failed to 1) timely and appropriately respond to the incident, 2) adequately assess the potential for offsite contamination, and 3) take corrective action to preclude recurrence.

Details

- Plant procedures require that personnel must successfully pass a gamma contamination portal monitor two times if an initial alarm is received to exit the radiological controlled area or personnel access facility, unless authorized by radiation protection supervision. Contrary to this requirement, on March 15, 2009, a contract radiation protection technician exited the PNPP site following three consecutive portal monitor alarms at the personnel access facility without authorization from radiation protection supervision. This was an apparent, intentional action which violated plant radiation protection procedures for portal monitor usage.
- Perry radiation protection management was not informed of the contract radiation protection technician's actions and subsequent departure from the site until approximately 14 hours after the events took place. This delay in notification prevented a timely and appropriate response by the radiation protection organization, which would have included assessing potential for offsite contamination and performing contamination surveys.
- After learning of the contract radiation protection technician's actions, a staff radiation protection technician was assigned to investigate for potential contamination on the individual. The radiation protection technician performed a radiological survey of the contract radiation protection technician's clothing, but did not document the survey results or inform radiation protection management of contamination found on the individual's shoes and pants. The only information that was documented and communicated was the contamination found on the individual's coat. This incomplete communication of the worker's condition also prevented the radiation protection organization's appropriate assessment and response for potential offsite contamination and performing surveys.
- In summary, the violation was caused by 1) intentional action by the contract radiation protection technician, 2) a radiation protection program deficiency where the response to portal alarms was not clearly specified following the unauthorized departure of the contract radiation protection technician, and 3) lack of communication and documentation on the facts and conditions associated with the event.
- The event was entered in the corrective action program. The affected contract radiation protection technician's access was terminated. Training for the radiological worker training program was enhanced to provide better direction when a portal alarm is received and actions to take when an alarm is observed. Additionally, the personnel contamination monitoring procedure was revised to provide additional actions for radiation protection personnel responding to portal monitor alarms. The details associated with this violation and the lessons learned were reviewed with radiation protection technicians during the second half of 2010 Radiation Protection Continuing Training. The details will also be incorporated into the Radiation Protection supplemental personnel training program and discussed under industry events. Training of supplemental Radiation Protection supplemental personnel will be conducted prior to the PNPP's next refueling outage. The completed and planned corrective steps are considered sufficient to preclude recurrence of the cited violation.

Cobalt 58 found in sediment

Routine sediment sampling of the Northwest Drain Impoundment was performed. The vendor laboratory performing the analysis (Midwest Laboratories) notified the station of elevated Cobalt - 60 activity in two sediment sample points and that one of the two positive sample points contained detectable levels of Cobalt-58 (84 pCi/kg) and Manganese-54 (248 pCi/kg). The Northwest Drain Impoundment has been monitored for radioactivity since 1999 due to low levels of Cobalt - 60 and Cs-137 and maintained in 10CFR50.75g file. Issue was documented in Corrective Action Program (CR 10-79628) and a sampling plan was initiated in order to identify the source.

No specific source of the Cobalt - 58 or Manganese - 54 could be identified. Potential Sources considered included:

- Transmission Yard
- Storm Drains east of transmission yard (where rad shipment vehicles park before entering the security access point).
- West Storm Drain system (620 yard area and alleyways)
- M35 (Turbine Building Drains) when directed to storm drains
- Heater Bay, Offgas, Turbine, and Radwaste Building roof drains (hard-piped to storm drains)

None of the follow-up samples had detectable levels of Cobalt - 58 or Manganese - 54 in either water or sediment samples. Sampling plan did identify that low levels of Cobalt - 60 and Cesium - 137 were in sediment/dirt from areas in and around the Radwaste Building and Turbine Building (West) roll up doors.

This is where Radioactive Material shipments/movements most frequently occur at Perry. Previously, Radiation Protection also required some shipment vehicles to be hosed off in the yard area prior to bringing into the Radwaste Truck bay (safety concern due to ice build-up/road grime).

The CAUSE appears to be a one-time migration of very low level activity from this area to the storm drain system. Radiation Protection has a corrective action to clean up contaminated sediment/dirt in the 620' yard area and put in with the ESW silt. Chemistry has added additional monitoring points into our sampling routine to provide quicker and more precise identification of low level radioactive material transport.

September 1, 2010 - Security Event (retracted)

Event Notification 46219 was updated on 9/30/2010 to be not reportable. The updated notification reads as follows:

“A 1 hour Physical Security Notification was made on September 1, 2010, in accordance with 10CFR73.71(b) and 10CFR73, Appendix G, “Reportable Safeguards Events.” This report was made when a vendor employee was found to be in possession of contraband. The contraband was detected by a Plant Security Officer’s vehicle search prior to the vehicle and contraband being allowed into the protected area. Based on further investigation, it was determined that the employee had no malevolent intention and did not attempt to introduce contraband into the protected area. This event has been determined not to be reportable under 10CFR73, Appendix G, and this portion of ENF 46219 is retracted. ENF 46219 was also reported , under 10CFR72(b)(2)(xi), a 4-hour “Offsite Notification” for notifying the Lake County Sheriff’s

Department and the Painesville, Ohio FBI branch about the contraband incident. This portion of ENF 46219 is not retracted.”

Status of Dry Cask Storage

Final cask loading preps in progress (training, procedures, and equipment checkout) Internal and NRC-observed dry runs beginning in late October through November. Initial cask loading is to commence in early December 2010.

FENOC

E-data update

The data points for Davis-Besse have been selected and reviewed to ensure they are comparable to those selected for Beaver Valley and Perry. IT is programming the files for collection of Davis-Besse data. Davis-Besse engineering is writing the program to extract the data and send it to IT. FE Webmethods group is working to develop the screens for the website. Simulator information will follow after we have tested the site and moved actual plant data to the Production server. Still expect Davis-Besse actual plant and simulator data to be available early next year in time to support the Dry Run and Evaluated Exercise.

The Beaver Valley simulator data for Unit 2 is being worked concurrent to the Unit 1 outage. Internal servers and firewalls are being built. Expect to have data in the Developmental section of e-Data by November of 2010. Test plans are ready to support a move to the Production Server by the end of 2011. This work is running concurrent with the Davis-Besse e-Data activity.

Common dose assessment update

Based upon Fleet Project Review Committee (FPRC) meeting held in July 2010, the proposed vendor supplied dose assessment software (MIDAS) received a Fleet Value Rating (FVR) of 38 points. Although FPRC members acknowledge a genuine need for technology improvement in the dose assessment arena, budgetary restraints and funding of this project in 2011 is questionable. Therefore, an alternate means to improve and standardize dose assessment software from a Fleet perspective was pursued. Industry peers have developed user friendly frontend software called URI, (Unified RASCAL Interface) to enhance the functionality the dose assessment software that the NRC utilizes to perform dose assessment - Radiological Assessment System for Consequence Analysis (RASCAL).

The FENOC Common Dose Assessment Project Manager received training and a beta copy of the URI frontend software on September 16. Currently, testing and evaluation of the URI software is being performed by Fleet Emergency Preparedness personnel and comparing the results and the functionality of URI software to the desired features and specifications set forth by the FENOC Common Process Team in a effort to see if this software meets Fleet dose assessment needs.

Web EOC

Development work continues. The system has been programmed with a central activity log that is updateable from each facility. A central priority board has been developed that is maintained by the Technical Support Center but visible from all facilities. Initial and follow-up notification forms are being developed and loaded as well. The common FENOC notification effort is progressing in parallel with WebEOC. The initial notification form will be very similar for the three stations with

only minor differences based on desires from the State of Pennsylvania. The schedule is for the product to be rolled out just after Davis-Besse's Evaluated Exercise next year. There is a very significant Change Management Plan and a number of procedures that have to be revised which is causing the long implementation schedule.

EPPI Procedure Revision

EPPI procedure was revised effective 8/17/2010. The changes reflected revisions to match groundwater requirements, including NEI notification, revised FE job titles, additional examples of EPPIs, and information required to provide for an EPPI. There are some minor changes requested to be included in next revision.

End of Report

Ms. Nancy Dragani asked about the Comprehensive Review.

Mr. Ricky Collings stated that it is security-sensitive – FOUO.

Ms. Nancy Dragani stated that she didn't think there was any general public in the room.

Ms. Tammy Little, assistant attorney general for Ohio EMA, stated that she thought that they would want to go into Executive Session because the minutes would be public. If FENOC is acceptable with that, the Board can vote on that. If they didn't, the minutes would be public.

Mr. Ricky Collings stated that the information included probably wouldn't help anybody but Ohio EMA to understand the gaps that are identified.

Ms. Nancy Dragani asked if they needed to go into a closed session.

Ms. Tammy Little stated that the Executive Session technically would be the Executive Board only.

Motion to go into Executive Session – Security Sensitive at 3:20 p.m.

Mr. Robert Owen of the Ohio Department of Health (ODH) moved for the Executive Board only to go into an Executive Session – Security Sensitive at 3:20 p.m. Mr. Daniel Fisher, of the Public Utilities Commission of Ohio (PUCO) seconded. The motion was carried.

Motion to close the Executive Session at 3:50 p.m.

Mr. Chuck Kirchner of the Ohio Department of Agriculture (ODA) moved for the Executive Board only close the Executive Session – Security Sensitive at 3:50 p.m. Mr. Daniel Fisher, of the Public Utilities Commission of Ohio (PUCO) seconded. The motion was carried.

Motion to adjourn the URSB meeting at 3:51 p.m.

Mr. Daniel Fisher, of the Public Utilities Commission of Ohio (PUCO) moved to adjourn the Utility Radiological Safety Board meeting of October 12, 2010 at 3:51 p.m. Mr. Robert Owen of the Ohio Department of Health (ODH) seconded. The motion was carried.

4/15/11
DATE



NANCY J. DRAGANI, CHAIR
UTILITY RADIOLOGICAL SAFETY BOARD