

FY 2011

URSB Annual Report



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REPORT FROM THE CHAIRMAN





Utility Radiological Safety Board of Ohio

REPORT TO THE GOVERNOR AND GENERAL ASSEMBLY

Governor Kasich and Members of the Ohio General Assembly:

The member agencies of the Utility Radiological Safety Board (URSB) of Ohio - the Departments of Agriculture, Health and Commerce, the Emergency Management and Environmental Protection Agencies, and the Public Utilities Commission are pleased to present the 2011 annual report of major Board activities.

The URSB was established in July 1989 (ORC Section 4937) to coordinate the nuclear power plant responsibilities of its member agencies. The Board is also charged with the responsibility of enhancing the quality of the State's response to nuclear power safety issues in the areas surrounding our nuclear power plants. This report delineates the actions of the Board toward the accomplishment of these goals.

The 2010 Perry Nuclear Power Plant partial participation exercise was conducted on September 28, 2010. Preliminary findings include one Area Requiring Corrective Action (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." This finding was appealed by Ohio Emergency Management Agency (OEMA) Radiological Branch staff. The Federal Emergency Management Agency (FEMA) later rescinded this finding. The counties of Lake, Ashtabula, and Geauga did not receive any FEMA findings. OEMA received the final Perry Nuclear Power Plant After Action Report / Improvement Plan in February, 2011. The report verified that state successfully cleared an Area Requiring Corrective Action that was incurred during the April 2010 Beaver Valley Nuclear Power Station exercise. There were no open issues moving forward from this exercise.

The 2011 Davis Besse Nuclear Power Station (DBNPS) partial participation exercise was conducted on May 10, 2011. FEMA evaluators in Ottawa County identified two Areas Requiring Corrective Actions, which were re-demonstrated prior to the conclusion of the exercise. Lucas County received a single finding which was re-demonstrated. There are no open issues moving forward from this exercise.

There was one classifiable event in SFY11 for First Energy Nuclear Operating Company (FENOC) plants. Davis-Besse Nuclear Power Station declared a Notice of Unusual Event (NOUE) on January 19, 2011 due to a Fire and Explosions in the Owner Controlled Area. The fire was in a temporary transformer and power cables in a construction zone. The fire was quickly extinguished and there was no impact on public health and safety from this event.

The URSB continues to closely monitor those nuclear power issues that could have a direct effect on Ohio's nuclear utilities and the safety of Ohio's citizens. We are currently awaiting the outcome of Nuclear Regulatory Commission (NRC) rule changes and how their implementation will impact the FEMA Exercise schedule. The addition of Hostile Action Based scenarios results in an entirely new planning challenge more consistent with the State of Ohio's All Hazards approach.

The recent natural disasters in Japan and the effect on both their nuclear power industry and overall utility infrastructure highlights the magnitude of the URSB's mission. I encourage your review of the many specific activities of the URSB and its member agencies contained in the enclosed overviews.

Sincerely,



NANCY J. DRAGANI
Chair

DESCRIPTION OF THE URSB



DESCRIPTION OF THE URSB

The Utility Radiological Safety Board (URSB) of Ohio was established by the Ohio General Assembly as part of Amended Substitute House Bill 111 in July of 1989 and later revised by Amended Substitute House Bill 215 in June 1997. The Board's purpose is to develop a comprehensive policy for the State regarding nuclear power safety. The Board's objectives are to promote safe, reliable, and economical power; establish a memorandum of understanding with the Nuclear Regulatory Commission (NRC) and the State; and recommend policies and practices that promote safety, performance, emergency preparedness, and public health standards that are designed to meet the State's needs.

The URSB membership consists of six state agencies: the Ohio Departments of Agriculture, Commerce, and Health; the Ohio Emergency Management and Environmental Protection Agencies; and the Public Utilities Commission of Ohio.

The URSB has a Working Group comprised of member agencies' staff to support the Board and a Citizens Advisory Council (CAC), which provides the Board with citizen concerns. Board meetings are held quarterly at the offices of the Ohio Emergency Management Agency at 2855 West Dublin-Granville Road, Columbus, Ohio. The meetings are open to the public.

To find out more information concerning the URSB and its members, please refer to the URSB homepage at <http://www.ursb.ohio.gov/index.stm> or contact the URSB Secretary at (614) 889-7150. The Board members for SFY11 and their respective designees are listed below:

Ohio Department of Agriculture
 Mr. James J. Zehringer, Director
 Mr. Charles Kirchner, Designee

Ohio Emergency Management Agency
 Ms. Nancy Dragani, Director
 Mr. Melvin House, Designee

Ohio Department of Commerce
 Mr. David Goodman, Director
 Mr. Dean Jagger, Designee

Ohio Environmental Protection Agency
 Mr. Scott J. Nally, Director
 Ms. Cindy Hafner, Designee

Ohio Department of Health
 Theodore E. Wymyslo, M.D., Director
 Mr. Michael J. Snee, Designee

Public Utilities Commission of Ohio
 Todd A. Snitchler, Chairman
 Mr. Daniel Fisher, Designee

URSB ACTIONS AND ACTIVITIES



SUMMARY OF URSB ACTIONS AND ACTIVITIES:

Statutory Meetings:

During FY 2011 the URSB held three statutory meetings: July 12, 2010, October 12, 2010 and April 11, 2012. A fourth Meeting was scheduled for January 10, 2011 but was cancelled due to severe weather throughout the state.

Minutes from these meetings are available by contacting the URSB Secretary at 614-889-7150

July 12, 2010 Statutory Meeting Summary:

A. Update of the URSB Initiatives

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

The 2010 BVPS full participation exercise was conducted in the evening on April 20, 2010. Field Monitoring Teams (FMT) conducted their activities during the day. The two dry runs were conducted previous to the evaluated exercise. One dry run was conducted on March 23, 2010 with a second dry run on April 13, 2010 to address difficulties experienced during the first dry run.

FEMA V identified three state findings during the April 20, 2010 BVPS full participation exercise. The state received a Deficiency and two Areas 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 on 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 will be re-demonstrated on July 22, 2010 along with the ARCA under Criterion 4.a.3 at the Ohio EMA EOC/JDF facility. The ARCA under Criterion 2.b.2 will be re-demonstrated during the September 28, 2010, PNPP exercise.

The 2010 PNPP partial participation exercise is scheduled for September 28, 2010. The dry run is scheduled for August 25, 2010. Training dates (with alternate dates) have been established.

The after action activities include an annual review of the State REP plan. Individual agencies continue to address issues noted from the two previous nuclear power plant exercises. The After Action meeting for the Beaver Valley full participation dry run exercise was conducted in the afternoon following the June 10, 2010 working group meeting. Issues arising from the April 20, 2010 BVPS evaluated exercise were identified and added to the After Action matrix. Unresolved After Action items were reviewed. Where appropriate the working group combined repeat issues or issues of a similar nature into one action item to be addressed. IZRRAG After Actions items are being captured separately. The issues are being addressed by e-mail with periodic meetings as necessary.

IZRRAG training and drills will continue to be conducted annually. IZRRAG training will be conducted on October 14, 2010. An IZRRAG drill to include the Field Team Center/Sample Screening Point activities will be conducted in November 2010. The next evaluated ingestion exercise for the State will be in 2012 with the Perry plant.

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.

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

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

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 utilized during the 2008 dry run and evaluated exercise with the PNPP. The e-data system has not been completed for the Davis-Besse plant.

Teletrix equipment has been purchased for training of Field Monitoring Teams (FMT). The Plume Tracker systems were used during FMT training conducted on March 9, 2010 and during the BVPS dry run and was used during the evaluated exercise. One additional unit was received which allowed three teams to be deployed during the April 20, 2010 exercise.

Ludlum Model 3 portable survey meters have been purchased to replace CDV-700RPs. All nuclear power plant affected counties will receive the Ludlum Model 3 instruments. Additional Ludlum Model 3 instruments and model 730 dosimeters have been purchased to ensure all monitoring locations in these counties have the Model 3 instruments and to replenish dosimetry as needed. Ten piezoelectric dosimeter chargers have been received for SFY 2010 to replenish responder supply and additional ten will be purchased in SFY 2011.

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 will follow the BVPS re-demonstration.

A committee, consisting of members from FENOC, ODH, and Ohio EMA, has been formed to evaluate dosimetry and instrumentation supplied to emergency workers. The committee has evaluated two different electronic dosimeters and is in the process of scheduling conference calls to discuss the evaluation of the units. A vendor demonstration was provided by Thermo-Fisher on May 27th to demonstrate recent additions to their product line. 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.

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 provided to aid in this task. The 2010 REP Plan was revised and submitted to FEMA and has received approval.

The Working Group has been advised that additional ICS training may be needed to ensure EOC staff have met NIMS criteria. The working group is investigating this issue and available training opportunities.

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.

Ken Barnhart, ODH, provided the Board with an overview of a common dose assessment and KI.

The working group, along with FENOC, had undertaken an evaluation of available software. A 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 and methods of funding the 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.

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 will be provided for northeast Ohio distribution.

Carol O'Claire, Ohio EMA, provided the Board with a status of draft REP guidance and NRC rulemaking.

Currently the NRC and FEMA released draft documents for public comment regarding radiological emergency preparedness. The comment period closed October 19, 2009. The Board has 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.

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

B. Midwestern Committee Report

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

The Midwestern committee met in Chicago on May 25.

On May 26, the Midwestern committee hosted the first meeting of the National Transportation Stakeholders Forum (NTSF). This organization replaced the DOE Transportation External Coordinating/Working Group. The NTSF will be the mechanism through which DOE communicates at a national level with states and tribes about DOE's shipments of radioactive waste and materials.

On May 27, there was a meeting of the DOE TRANSCOM users.

Mr. Carlisle Smith of PUCO provided updates on the activities of the Reciprocal Rail Inspection group and the Fee States Caucus. He also informed the committee that Ohio's rules in support of fee legislation were before the commission for approval.

New Business

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

Summary of Report:

Davis-Besse Nuclear Power Plant

On April 27, 2010, 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 being of very low safety significance were identified. The NRC-identified findings were the failure to maintain normally energized medium voltage cables in an environment consistent with cable design, and a non-compliance with transient combustible material control procedures. The self-revealed finding was identified for the failure to adequately implement post-maintenance testing.

On June 23, 2010, the Nuclear Regulatory Commission issued a Confirmatory Action Letter to FirstEnergy Nuclear Operating Co. (FENOC) committing the company to actions needed to assure the NRC that FENOC can safely restart the Davis-Besse Nuclear Power Station. The NRC's confirmatory action letter is designed to address issues that contributed to the March 12 discovery of cracks and leakage in multiple Control Rod Drive Mechanism (CRDM) nozzles. The letter details and confirms FENOC's agreement to take certain actions in response to the identified cracks.

The Davis-Besse commitments include:

- Shutting the plant down no later than October 1, 2011 and replacing the reactor head with a newly manufactured reactor head before returning to operation
- Providing technical information regarding the time at which the next inspection of the existing reactor head would be required, based on reactor head temperatures, regardless of the 2011 planned shut down
- Providing a sample of the CRDM nozzles to the NRC for independent crack analysis
- Strengthening its leakage monitoring procedures

A copy of the confirmatory action letter is available on the NRC Web site at www.nrc.gov/reading-rm/adams/web-based.html using the number ML101740519 or from the Region III Office of Public Affairs

Perry Nuclear Power Plant

On May 4, 2010, the first quarter integrated inspection report for Perry was issued. Based on the results of this inspection, two NRC-identified findings of very low safety significance were identified. The NRC-identified findings were the failure to accurately assess plant risk during maintenance activities, and a failure to make an accurate immediate operability determination based on plant conditions and available information.

Beaver Valley Power Station

On April 23, 2010, the first quarter integrated inspection report for Beaver Valley Units 1 and 2 was issued. Based on the results of this inspection, one self-revealed finding of very low safety significance was identified for the failure to properly implement work instructions causing leads to be inadvertently lifted for an alarm in the main control room.

FEMA Disaster Initiated Review

The following information on a FEMA disaster initiated review is offered to the board. A disaster initiated review will determine the status of offsite emergency preparedness, and its impact on restart activities, following a natural disaster (e.g., hurricane, tornado, flood, storm, earth quake) in the vicinity of a power reactor.

End of Report Summary

Mr. Barker’s report as submitted to URSB is available by contacting the URSB Secretary at 614-899-7150.

B. Mr. Ricky Collings provided the Board with an update on plant performance and FENOC activities:

Summary of Report:

Beaver Valley

a) Unit 2 Exercise – summary and results

The 2010 Exercise preparation for the Red Team included the following scenarios:

- Mini-Drill #1
- Dry Run Exercise #1
- Dry Run Exercise #2
- Evaluated Exercise

Based on an evaluation of objectives, as well as a thorough critique of both participant and observer comments, it was determined that the on-site Emergency Response Organization effectively demonstrated the ability to adequately respond to the events presented in the drill and exercise scenarios.

Offsite performance during the Exercise resulted in:

- A Deficiency for the State of Ohio
- Two Area Requiring Corrective Action (ARCAs) for the State of Ohio
- An ARCA for Columbiana county in Ohio
- A Deficiency for Hancock county in West Virginia
- Two ARCAs for West Virginia (a third was corrected on the spot)
- Five Planning Issue for West Virginia

The Ohio Deficiency is scheduled to be re-demonstrated in the next few weeks. Resolution of the ARCAs is also underway with Ohio re-demonstrating at the same time as the Deficiency and other one during the Perry Exercise this fall.

b) Siren upgrade project status

Beaver Valley has 120 sirens. 27 of those were upgraded a few years ago including battery back up power. An additional 35 sirens were selected early in 2010 to be replaced. Another project to replace additional sirens in 2011 is being processed to obtain funding.

Davis-Besse

a) 16RFO Axial Cracking and Repairs

During Davis-Besse’s 16th Refueling Outage, testing of the existing reactor head Control Rod Drive Mechanism nozzles led to modifications on 24 of the 69 CRDM nozzles due to indications of Primary Water Stress Corrosion Cracking (PWSCC) – a known industry issue identified in the 1990s. The new reactor head assembly that includes materials more resistant to the corrosion cracking will be installed in 2011.

b. Update Groundwater Sample Results

Increased sampling of MW-105A was initiated due to elevated tritium levels in January 2010. Sampling of this well occurred monthly through the spring as well as when all Groundwater Protection Initiative wells were sampled for the semi-annual requirements of the program. In addition, seven pre-construction era wells were sampled in order to bound the area of the tritium plume.

A Problem Solving Decision Making Team was formed and a problem solving plan was finalized on June 4. The plan includes:

- Increased well sampling.
- Various Storm Sewers are being evaluated for tritium.
- Sumps in the Turbine Building and Water Treatment Plant are being sampled.
- Samples from these sources will be evaluated again after the Plant has been back in operation for a period.
 - Tritium levels in Plant sumps are expected to increase, and will be compared to the monthly well sample results to try to determine if there is an active leak or if the increased tritium being observed is from previous leaks.
- Notifications have been and will continue to be made for well samples over 2,000 pCi/liter tritium.

b) Expedited Head Replacement/Steam Generator Replacement

The replacement of Davis-Besse’s Reactor Head has been accelerated to the fall of 2011 per the Corrective Action Letter reported by Mr. Barker previously. The new head uses Control Rod Drive Mechanism (CRDM) nozzles made of an Alloy 690 material which is less susceptible to Primary Water Stress Corrosion Cracking (PWSCC). The steam generators are being fabricated and will be installed in 2014, as previously planned. These long-term improvements will strengthen the plant’s material conditions.

Perry Plant

a) Reactor Scram of May 11

On May 11, 2010, at 2318 hours, a manual Reactor Protection System actuation was inserted in accordance with Technical Specification (TS) 3.1.5, “Control Rod Scram Accumulators.” A four hour non-emergency notification was made to the NRC Operations Center at 0312 hours on May 12, 2010, in accordance with NRC requirements

b) Status of Cross-Cutting Areas of Human Performance and Problem Identification and Resolution

The current Perry Nuclear Power Plant (PNPP) status in regards to the Nuclear Regulatory Commission (NRC) Reactor Oversight Process (ROP) Cross-Cutting Areas:

- 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 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

- For the assessment period from January 1 through December 31, 2009, the total number of inspection findings with documented cross-cutting aspects decreased slightly to 19.
- The NRC will continue to monitor the human performance area.
- This assessment period is the fifth consecutive assessment period identifying a substantive cross-cutting issue in the human performance area.
- The NRC expressed continuing concern with the scope of the PNPP efforts and progress in addressing this cross-cutting area and concluded that the substantive cross-cutting issue in human performance will remain open.
- Because efforts to effect improvements in the human performance area have not been sufficiently effective, the NRC requested that PNPP have an independent assessment of safety culture performed to help improve understanding of how the overall safety culture at PNPP may be impacting the ability to achieve sustained results.
 - This assessment has been completed and is available for review during the NRC biennial Problem Identification and Resolution (PI&R) inspection scheduled for November 2010.

Problem Identification and Resolution (PI&R)

- For the same assessment period, the NRC identified four findings in the PI&R area with the same aspect of P.1(c) (corrective action program -thorough evaluation).
- NRC concluded that corrective actions have been unsuccessful in addressing this area.
- NRC expressed concern that a weakness in the aspect of thorough evaluation may be a significant contributor to the PNPP's inability to correct the human performance issues.
- NRC has a concern with the scope of PNPP's efforts and progress in addressing the cross-cutting area performance deficiencies.
- NRC has concluded that a substantive cross-cutting issue exists in this area.

a. Recirculation pump trip of June 4

On June 4, 2010, at 0707 hours, the Reactor Recirculation Pump "A" tripped off due to the power supply breaker 5A opening. The 5A breaker opened as a result of a failed optical isolator circuit output card. The power plant entered single loop operations with final reactor power at approximately 58% rated thermal power. The optical isolator card was replaced. The operators

then lowered reactor power to approximately 21% on Saturday, June 5 in order to re-start Reactor Recirculation pump A and commence power ascension. Following a rod pattern adjustment and continued power ascension, the plant returned to 100% power on June 9, 2010.

The root cause investigation team concluded the Reactor Recirculation 'A' Pump trip was caused by an inadequate circuit design to suppress the voltage surge (Inductive Kick) from relay 1B33A-K150A. Additional corrective actions have been developed.

b. Increase in groundwater sample > 5000 picocuries/liter

On June 14, 2010 Environmental/Midwest Labs Inc. notified Perry Nuclear Power Plant chemistry personnel that sample results from Plant Piezometer Tube 6 showed a tritium value of 5,241 pci/ L. This sample was obtained at the station on May 2, 2010. This value exceeded the trigger criteria of 2,000 pci/L specified in the FENOC Groundwater Monitoring procedures.

The Offsite Dose Calculation Manual (ODCM) required reporting value for tritium (20,000 pCi/L) was not exceeded. No other regulatory limits were challenged or exceeded.

All required actions from the Groundwater Monitoring Plan have been completed. No further actions required.

c. June 23 earthquake

The June 23, 2010 Val-des-Bois, Quebec earthquake occurred at 1:42 pm local (eastern) time 56 km (35 miles) north of Ottawa, Ontario. The preliminary estimate of magnitude (M) is 5.0, at a depth of 16 km (10 miles). This earthquake occurred near the southern edge of the Western Quebec Seismic Zone. The earthquake was felt onsite and reported to the Perry Control Room. Plant Operators entered the Earthquake abnormal operating instruction and actions taken found no structural damage. The Emergency Plan was reviewed for entry criteria, but the criterion was not met as alarms were not indicated on the Monitoring panels.

FENOC

a) E-data update (BVPS/DBNPS)

Beaver Valley – The equipment to install a cyber-secure environment for Unit 2 simulator has been received. Information Technology (IT) is building the environment and FENOC has lined up the points to be installed. The screens are exactly the same so they are also ready for data when the server work is completed. Estimate is in the next 60 days the data will be available, formatted, tested and released to Production. Unit 1 simulator data will be moved to the same server system as Unit 2 after upgrades are completed this fall during the outage.

Davis-Besse – An initial set of points have been selected, rough drafts of the screen layouts have been developed and IT resources have been budgeted. Meetings with site personnel are planned in August with programming to begin in early fall with a goal of getting actual plant data to Production prior to Thanksgiving. Simulator data is targeted by the middle of February 2011.

b) Common dose assessment update

A common program has been identified. The approach will be to phase in the program over two years with Beaver Valley being the first plant to get the new program and progressing to Davis-Besse and finally Perry. There is another path being reviewed. Another utility is working to develop a front end program to the RASCAL program. The front end is intended to make the program more user friendly and provide auto-population of information. FENOC is a beta tester of the program.

c) Central Joint Information Center

A facility has been identified and floor plan developed. Fleet EP presented the project at the Project Review Committee meeting in June. The PRC approved the approach and moved the project into the next phase. The target schedule is to renovate the facility in 2011 and move functions in 2012 after Beaver Valley’s Evaluated Exercise but before Perry’s.

d) Comprehensive Review

The three site reports have been reviewed and information associated with Emergency Preparedness has been consolidated. The material is not Safeguards related but it is identified as “Official Use Only – Security Related Information”. FENOC is prepared to debrief the information to the State of Ohio but is not allowed to be open for public review.

End of Report Summary

Mr. Collins’ report as submitted to URSB is available by contacting the URSB Secretary at 614-899-7150.

October 10, 2010 Statutory Meeting Summary:

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.

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.

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

C. URSB FY2010 Annual Report

The board approved the URSB FY2010 Annual report.

Copies of the report may be obtained by contacting the URSB Secretary at 614-889-7150

NEW BUSINESS:

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

Summary of Report:

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. A supplemental inspection to review the actions taken to address the White finding as previously addressed by Ms. O'Claire was performed during the week of August 16, 2010. The issuance of this inspection report is in NRC management review.

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.

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

- 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.
- 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.
- 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.
- 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.

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.

End of Report Summary: Mr. Barker's report as submitted to URSB is available by contacting the URSB Secretary at 614-899-7150.

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.

C. Mr. Ricky Collings provided the Board with an update on plant performance and FENOC activities:

Summary of Report:

Beaver Valley Power Station

Residual Heat Removal System Leak:

- Beaver Valley Power Station Unit No. 1 was shut down at 0011 hours [EDT on 10/02/10] to enter a scheduled refueling outage.
- Approximately five hours later, 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.
- 1011 hours, evaluation reported a 270 degree circumferential crack in the socket weld on the RHR side of the valve. A temporary clamp was installed.
- Without reasonable assurance of RHR System operability, both trains of RHR were declared inoperable.
- 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.

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 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 and 8" Charging Pump suction header was repeated 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.

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.

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

Topic covered by Mr. Barker was reiterated from FENOC point of view.

Level IV Violation: Radiation Protection/Portal Monitor Alarm

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.

- 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 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 and Manganese-54

- The Northwest Drain Impoundment has been monitored for radioactivity since 1999 due to low levels of Cobalt - 60 and Cs-137 and maintained in per federal regulations.
- Issue was documented in Corrective Action Program (CR 10-79628) and a sampling plan was initiated in order to identify the source.
- 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.

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.

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 Web methods 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 an 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 Summary: Mr. Collings' report as submitted to URSB is available by contacting the URSB Secretary at 614-899-7150.

END OF MEETING MINUTES SUMMARY

January 10, 2011 URSB Statutory Meeting Summary:

Meeting was cancelled due to Severe Weather

April 11, 2011 URSB Statutory Meeting Summary:

I. OLD BUSINESS

A. Midwestern Committee Report

Mr. Dan Fisher of the Public Utilities Commission of Ohio stated that Carlisle Smith, the URSB's representative to the Midwestern Committee, prepared the Midwestern Report of the meeting held December 7, 2010. He directed the Board members to the report and offered to answer any questions. He stated there will be a Midwestern Committee meeting held in May in Denver, CO. PUCO, ODH and possibly a representative from EMA will be present.

**Council of State Governments
Midwestern Radioactive Materials Transportation Committee
Fall meeting, Milwaukee, WI, December 7-8, 2010**

- The NTSF created four ad hoc working groups:
 - o Financial guidance for states and tribes receiving WIPP funding;
 - o Improvements to DOE Prospective Shipments Reports (PSR);
 - o Notification issues for states and tribes;
 - o Improving communications;
- Carlisle Smith (Ohio) updated the Committee on the reciprocal rail inspection program working group.
- Ohio's Department of Health is experiencing a large number of retirements which is having a direct impact on the Agencies institutional knowledge of RAM transportation related issues. OEMA hosted a TRANSCOM Superuser training this past fall. The number of CO-60 shipments had dropped significantly since Ohio's fees were implemented in 2009;

B. Updated Status of URSB Initiatives

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

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. Received the final PNPP After Action Report / Improvement Plan in February, 2011. The state received a planning issue under Criteria 2.b.1 Field Monitoring Teams coordination. The ARCA was verbally rescinded by FEMA in mid-December.

DAVIS-BESSE NUCLEAR POWER STATION EXERCISE

The DBNPS partial participation exercise will be conducted on May 10, 2011. The dry run was conducted on April 5, 2011. The FMT drill was held on April 4, 2011.

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 have been added to the After Action Matrix. A letter was sent to FENOC requesting assistance to resolve outstanding FENOC related issues. A conference call was conducted with FENOC to resolve some of the issues and the After Action Matrix was updated accordingly. The next After Action meeting will be held following the Davis-Besse 2011 exercise and quarterly thereafter.

IZRRAG ACTIVITIES (ODH/EMA/EPA/ODA)

IZRRAG training and drills will continue to be conducted annually. IZRRAG training was conducted on October 18, 2010. An IZRRAG drill to include the Field Team Center/Sample Screening Point activities was conducted on October 27, 2010. An IZRRAG Tabletop drill was conducted on November 10, 2010. The next evaluated ingestion exercise for the State will be in 2012 with the Perry plant. The 2011 IZRRAG training is under development.

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.

DAVIS-BESSE NUCLEAR POWER STATION (DBNPS):

Davis-Besse transitioned to column one of the NRC Reactor Oversight Matrix due to the closure of the White Finding as described in NRC Inspection Report No. 05000346/2010502 as of December 28, 2010.

Davis-Besse received the replacement head on November 29, 2010. The working group will request JIOPs to observe the reactor head evolutions.

Davis-Besse has submitted an application to the NRC for a 20-year license renewal. The Atomic Safety Licensing Board (ASLB) hearing was conducted on March 1, 2011. The working group is monitoring the issue.

BEAVER VALLEY NUCLEAR POWER STATION

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

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 were received 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.

STATE DOSE ASSESSMENT (ODH/EMA)

In 2007, a working group of utility and state agencies 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. No meetings are currently scheduled to further discuss development of the program.

FENOC has chosen MIDAS as their dose assessment program. ODH and EMA will undertake a re-evaluation of RASCAL 4.0. It is felt that RASCAL is a viable alternative to explore.

KI (ODH/EMA)

The replacement of KI will be addressed in 2014.

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. FEMA has developed draft Impact Papers. State of Ohio has submitted comments to National Emergency Management Association (NEMA). The draft Impact Papers were discussed at the January 27, 2011 NEPAC meeting. URSB Working Group members were in attendance. The NRC and FEMA are planning public workshops to discuss the implementation of FEMA guidance and NRC rules following finalization of rules.

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. The above mentioned Impact Papers address the inconsistencies between NUREG-0654 and NIMS.

The Working Group has been advised that additional ICS training is needed to ensure EOC staff meets NIMS criteria. ODH held ICS-300 training in the first quarter of 2011. ODA has scheduled ICS-400 training for May 24-25, 2011. These trainings are available to all URSB agencies.

PROCEDURAL REVIEW (ALL)

The Working Group continues to review procedures to ensure consistency among member agencies. The emergency phase procedure review has been completed.

PROCEDURES REVIEW COMPLETED

State Assessment Room	Field Operations
Dose Assessment Group Supervisor	Field Monitoring Team Coordinator
Dose Assessment Unit Leader	Field Monitoring Team Members
Dose Assessment QA Systems Operator	Field Monitoring Team Courier
State Dose Assessment Systems Operator	Dosimetry Coordinator
Formal Line Communicator	Sample Screening Point
Informal Line Communicator	JIC Liaison
County EOC Liaison	
Utility EOF Liaison	
Field Monitoring Team Communicator	
Assessment Branch Director	
Assessment Support Unit Leader	
Executive Group Liaison	

The next set of procedures to be reviewed will be those concerning IZRRAG.

AGRICULTURE BROCHURE (ODA)

The agriculture brochure has been updated and distributed to businesses and farms within a 10-mile radius of the nuclear power plants. The brochure can be found on the ODA and EMA websites.

JOINT INSPECTION OBSERVATION PROGRAM (ALL)

JIOP INSPECTIONS

JIOP Number	Date(s)	Inspection	Agency
2010-DBNPS-07	November 15-19, 2010	Radioactive Gaseous and Liquid Effluent Treatment and Reactor Coolant System Activity	ODH
2010-DBNPS-08	December 1-3, 2010	Follow-up Supplemental Inspection	OEMA
2010-DBNPS-09	December 13-17, 2010	Radiological Hazard Assessment & Exposure Controls, Occupational ALARA Planning & Controls, Occupational Exposure Control Effectiveness, and Verification of Licensee Responses	ODH
2011-PNPP-01	January 24-28, 2011	Radiation Monitoring Instrumentation, Reactor Coolant System Activity, Occupational Exposure Control Effectiveness, and RETS/ODCM Radiation Effluent	ODH
2011-DBNPS-01	January 24-28, 2011	Radiation Protection	ODH
2011-BVPS-01	March 21-25, 2011	Radiological Hazard Assessment and Exposure Controls, Occupational ALARA Planning and Controls, Occupational Dose Assessment	ODH

END OF INITIATIVES

Director Dragani addressed several points for the Board.

- The state of Ohio barely escaped an ARCA at the last exercise because of the Joint Information Center and the way state PIOs coordinated with the plant and with the media.
- Director Dragani stated that she is significantly concerned about the way we exercise public information. It is artificial and unrealistic in today's climate and we need to take a strong look at the way we handle public information at the nuclear power plants.
- Director Dragani wanted make the Board aware that this is something that the state is working on and that we are trying to make the public information and JIC concept more realistic.
 - Ms. O'Claire has mentioned this to FENOC and we are in the process of identifying one of our partner states in Region V and taking a field trip to their JIC during an exercise to see how another state handles public information during an exercise.
 - Michigan operates their JIC but has completed their exercise for the year and Ms. Dragani does not want to wait on this issue.
 - Region V operates very differently from Region III, so we need to identify an exercise in region V to visit.

- Director Dragani then asked regarding IZRRAG activities-how difficult would it be to get federal play at the next ingestion exercise?
 - Mr. Barker stated that it would be best for Ms. O’Claire to go through him and he can try to find out who the best point of contact it.
 - Ms. O’Claire stated we have submitted a letter to Mr. Bill King asking for federal involvement and asking for the outreach program that they usually provide ahead of an ingestion exercise.

I. NEW BUSINESS

A. Quarterly Reports

Director Dragani asked Ms. O’Claire to state why we have a new item added to the agenda-the Quarterly Reports-and why this was somewhat at Director Dragani’s request.

Ms. O’Claire stated that we certainly appreciate FENOC coming down to attend the board meeting. This is an oversight board and we want to hear what is going on with the plants, but more importantly, there is a “state” piece to the board too. Adding Quarterly Reports to the agenda is an attempt to make the state issue more prevalent to the Board and to allow the URSB Working Group members to brief what is happening in their respective state agencies regarding the nuclear power plants.

Director Dragani also said this is an attempt to make the meeting more “value-added,” -is this good the way it is, or are there discussion topics or elements that we should be talking about that we are not because we got into a two hour schedule and do not want the meeting to go longer. Her intention was not to put another requirement on the WG-it was really to make sure if we are spending two hours together every quarter, that it is the most productive two hours we can make it on this topic. The intent is for each agency to go over their report.

PUCO did not provide a report because there was nothing of note this quarter, besides the Midwestern Committee report, which was already covered, and Commerce is not represented.

Ohio Department of Agriculture

Mr. Chuck Kirchner provided the Ohio Department of Agriculture’s Quarterly Report. Aside from attending the monthly working group meetings, Agriculture has recently been involved with the Japanese situation and answering questions regarding food imports from Japan. The media has not helped with their reports about Iodine-131 found in rainwater around the country. ODA works closely with FDA and they monitor food imports. Approximately 4% of the food imported from Japan is seafood, snack food and processed fruits and vegetables. The FDA has a Food Import System in place that tracks all the food coming in to the country. Those firms outside the United States have to be registered with the FDA and when they are shipping to the United States, they have to let the FDA know to expect an upcoming shipment. In this case, they are paying a lot of attention of what is coming in from Japan. The FDA is working closely with Custom and Border Protection to share resources and techniques for measuring radiation. In Ohio, the U.S. EPA sends sample containers to the dairy division on quarterly basis and collect milk in two parts of the state and ship to Montgomery, Alabama for radiological testing. Because of the events in Japan and Iodine-131, they have ramped up testing. ODA has been getting calls from consumers.

One concern is with leafy vegetables that come in from Arizona and California and if the vegetables are ok to eat. ODA continues to monitor the situation.

Ohio Emergency Management Agency

Ms. O'Claire wanted to make sure everyone knew there was a change in administration-Mr. Tom Charles is the new Director of Public Safety. He used to be Ohio Inspector General.

The Perry Nuclear Power Plant ARCA has already been discussed. There is more detail contained in the Quarterly Report on the ARCA. The counties also incurred some ARCAs that were re-demonstrated on the spot. There were also a few planning issues.

The Davis-Besse Nuclear Power Station exercise was covered in the initiatives. Waterway clearance will be done out-of -sync on May 11 with ODNR, Division of Watercraft. Waterway clearance is very important to state of Ohio and FEMA wanted to see a demonstration of this.

An EPZ Training Working Group was put together with representatives from state agencies, counties and the utility. The group worked to compile standardized training objectives for workers, which will be implemented this year. The group is planning on meeting mid-year to see how process is going and see if any modules would need to be tweaked. Thank to Mr. Bear who spearheaded this project.

REP Guidance was covered in initiatives.

The Annual Letter of Certification was submitted and approved. The letter includes information on training, public information, drills, plans, exercises, equipment, and siren results. Ohio EMA compiles the letter, but input from counties and utility is required. Thanks to Mr. Pete Hill for compiling.-he did a phenomenal job. The letter will be distributed to NEPAC members.

Former Radiological Analyst with Ohio EMA and current Delaware County EMA director, Mr. Brian Galligher, was in Japan when earthquake hit; he was on Naval Assignment. He met with members of the Radiological Branch last week and briefed on his experiences over in Japan after the crisis and lessons learned that would be relevant to the REP program. His key points were: keep it simple, work with what you have, ramp up quickly and keep lines of communication open. He said that he would come to a WG meeting and brief the group on the issues he discussed with the Radiological Branch. It was interesting to have the perspective of someone involved with nuclear power who was over there and was able to see response first hand.

Mr. Bear participated in a NRC web conference on March 21. The NRC did respond and send people over to Japan, but it did not affect domestic oversight responsibilities. They will be looking for short and long terms review topics-massive blackouts, seismic shifts, etc. There will probably be some changes to how we do business in the next few years. The NRC reiterated that they are certain of safety of U.S. reactors. There was a recent seismic survey performed by the USGS for the East Central U.S. There were no significant changes in seismic activity for this part of country, so that means no seismic changes for plants in our area.

Director Dragani asked when the NRC is planning on doing a review of issues-is there a time frame? Mr. Bear stated that within the first 90 days, there will be a short term review, but there is no time schedule for long-term review. Mr. Barker stated that there was a press release, which

stated that there is a team assembled for task force and reviews will be done at 30, 60 and 90 days. The report will be sent to the Commission and will be a public report that will cycle down. That will set everything else in motion.

Director Dragani asked Mr. Barker if anyone at the NRC is working with the counties/states that are involved in NLE 11. Mr. Barker stated that he does not know if anyone has directly reached out to the states as of yet. He has not heard anything from the Region III standpoint and he would be involved in that reach-out to the states. Director Dragani asked how far west and south does Region III extend. Mr. Barker replied it is as far south as Illinois and Region III takes in material licensees in Missouri, Iowa and Minnesota. The Calloway nuclear power plant in Missouri would be for Region IV consideration.

EPA

Mr. Clayton gave the EPA Quarterly Report. EPA has also increased its' water sampling after the Japanese events. EPA takes composite samples and test every month. Now, with the Japanese situation, they are taking each rain separately and analyzing that and have found elevated iodine readings in Painesville area. There may be other sampling stations around Ohio.

EPA has been involved with Emergency phase procedure and IZRRAG procedure reviews.

The Radiation Assessment Team had training in response operations from March 9-11. The training emphasized meter usage and survey, as well as PPE and decontamination procedures. The training was sponsored by DHS and the team practiced with Franklin County. Part of the training emphasized multi-agency coordination and communication procedures.

The nuclear power plants have indicated that unescorted access training required in order to participate in JIOPs now includes escort training. In the past EPA has not been participating in JIOP observations because environmental inspections did not happen often enough for someone at EPA to maintain unescorted access status. Now that the escort training is now included in the unescorted access training, Mr. Clayton will have the opportunity observe some environmental inspections in conjunction with EMA or ODH.

ODH

Mr. Helmer stated that members of ODH participated in the URSB Working Group meetings and After Action Group, as well as the Training Working Group. In regards to NEPAC, he wanted to reiterate the importance of NEPAC and the ability of having state, utility and locals in the same room and a teleconference does not do that. This group is one of the most important groups that they have and affords an ability to address county and utility concerns. He is very pleased with JIOP program-it works well for the agencies, the utility and for the NRC.

ODH has a new director, Dr. Theodore Wymyslo. Mr. Michael Snee is now the Chief of the Bureau of Radiation Protection.

ODH has had a number of calls regarding precipitation sampling, which was somewhat surprising; there are more cisterns in state than we realize, especially in southwest and southeast Ohio. There is no reason to start a program for precipitation sampling because the U.S. EPA program is adequate. Continuous air monitoring has improved in Ohio. The U.S. EPA RadNet website provides continuous air monitoring.

In regards to the IZRRAG, Mr. Helmer believes it is important to keep-up with the group on a routine basis and just restart before exercise. ODH has been involving more of their staff on exercises, including x-ray. This does not represent any more of a need from the utility as far as support, but if we are able to have more people involved in exercise, we are in a better position to support around-the-clock operations if ever needed.

Director Dragani commented that she appreciated the Quarterly Reports.

B. NUCLEAR REGULATORY COMMISSION

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

Summary of Report:

DAVIS-BESSE NUCLEAR POWER PLANT

In the March 4, 2011, assessment letter, plant performance was in the Regulatory Response Column of the NRC Action Matrix for the first three quarters of the assessment period due to a White inspection finding that was issued on December 28, 2009. The finding was closed in a letter dated December 28, 2010. The NRC determined that performance for the station during the fourth quarter of the assessment period was within the Licensee Response Column because 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.

The NRC identified a cross-cutting theme in the work practices component of the human performance cross-cutting area. Specifically, four findings were identified with the cross-cutting aspect of work oversight. The NRC determined that a substantive cross-cutting issue does not exist.

Selected upcoming inspections from the 2011/2012 inspection schedule were identified.

Davis-Besse License Renewal

NRC License Renewal Environmental audit and the Safety audits for scoping and screening and the aging management program have been completed. The issuance of the supplemental draft environmental impact statement is projected for October 2011. The following link is for license renewal on the NRC public web site.

<http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>

PERRY NUCLEAR POWER PLANT

In the March 4, 2011, 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.

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

- Performance at Perry during the assessment period continued to exhibit weaknesses in the areas of human performance.
- In the mid-cycle assessment letter dated September 1, 2010, the NRC advised Perry of a substantive cross-cutting issue in the area of human performance with a cross-cutting aspect of work planning.
- The total number of findings with documented cross-cutting aspects in human performance remained constant with 14 findings in this assessment period.
- The assessment of the findings identified an additional cross-cutting theme in the human performance area, based on four findings with a cross-cutting aspect of documentation/procedures. In addition, while the number of findings in the work planning cross-cutting aspect decreased from four to three during the most recent assessment period, it is apparent that actions to date have not resulted in sustainable positive improvement in the area of work planning.
- Human performance substantive cross-cutting issue will remain open in the documentation/procedures and work planning aspects until sustained performance improvement in the human performance area is demonstrated.
- This assessment period is the *seventh* consecutive assessment period identifying a substantive cross-cutting issue in the human performance area first opened in the March 3, 2008, end-of-cycle assessment letter.
- 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 was reviewed during the biennial problem identification & resolution inspection in November 2010. The results of that inspection identified that improvements made to address the human performance substantive cross-cutting issue in work planning are not yet effective and that additional effort is needed.
- NRC notified Perry of the potential for the NRC to take additional actions not covered by the Action Matrix.
- NRC has determined that additional actions not covered by the Action Matrix are warranted.
- Prior to the 2011 mid-cycle assessment, the NRC will conduct an inspection of the long-standing, human performance substantive cross-cutting issue, beyond the baseline inspection program. Following notification of Perry's readiness for inspection, the NRC will perform an inspection to assess the effectiveness of corrective action to address the human performance substantive cross-cutting issue, specifically, the aspect of work planning. The inspection will focus on evaluating Perry's progress in developing and implementing corrective action and the metrics and measures used to determine performance improvement effectiveness. The NRC will conduct this inspection to evaluate whether adequate corrective action has been implemented for the human performance substantive cross-cutting issue; verify that the root causes of the issues have been identified; that their generic implications have been addressed; and that Perry's programs and practices have been appropriately enhanced to prevent recurrence.

Selected upcoming inspections from the 2011/2012 inspection schedule were identified.

BEAVER VALLEY

In the March 4, 2011, 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 2011/2012 inspection schedule were identified.

**NRC Information Notice 2011-05,
“Earthquake Effects on Japanese Nuclear Power Plants”**

The NRC issued Information Notice (IN) 2011-05 on March 18, 2011, to inform addressees of effects of the earthquake on nuclear power plants in Japan. The NRC expects that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. This information notice is publically available from the NRC public web site.

End of Report Summary

Mr. Barker’s report as submitted to URSB is available by contacting the URSB Secretary at 614-899-7150.

C. UTILITY REPORTS

Mr. Ricky Collings of First Energy Nuclear Operating Company provided the utility report updates.

Summary of Report:

1. Beaver Valley Power Station

a. Unit 1 Outage/Unit 2 Outage

Unit 1 (1R20) - In addition to replacing 60 of Unit 1’s 157 fuel assemblies, other projects and maintenance items completed during the outage were addressed.

Unit 1 has now operated for more than five years without experiencing a fuel defect. Unit 1’s next scheduled refueling and maintenance outage is planned for spring 2012. There were zero OSHA Recordable or Lost Time Accidents and only two First Aids. This is the second time since 2R11 that BV has recorded zero OSHA Recordable Accidents. Complete Core Offload was completed in 42 hours which is the Best for BVPS Unit 1 and was industry top quartile performance.

Unit 2 (2R15)- In addition to full core off-load/core reload with 64 new fuel assemblies, other projects and maintenance items completed during the outage were addressed.

b. Nov. 16 Unit 1 ECCS Relief Valve Leakage

- November 15th, 2010 during the performance of a Beaver Valley Power Station (BVPS) Unit-1 surveillance test Safety Injection pump test, discharge relief valve lifted.
- 20 gallons per minute leakage rate to the safeguards area sump.
- BVPS Unit-1 and Unit-2 enter technical specification Limiting Condition for Operation
- Both trains of Low Head Safety Injection (LHSI) declared inoperable per technical specification 3.5.2.
- The most probable Root Cause was determined to be a lack of organizational knowledge on relief valve sensitivity to nozzle loading effects from system piping.
- Corrective actions will repair the existing discharge piping configuration for the valve and improve the configuration of the discharge piping for other similar valves.
- Corrective actions will review and revise engineering process documents to consider the effects of nozzle loading on relief valves.
- Corrective actions also exist to establish steps (barriers) in the Maintenance Relief Valve procedures and work order task list instructions to check for improper piping configuration, which will address extent of condition/cause going forward relative to other relief valves.

2. **Davis-Besse Nuclear Power Station**

a. License Renewal

License Renewal Application (LRA) was submitted to Nuclear Regulatory Commission (NRC) on August 30, 2010.

An Environmental Public Meeting was held November 4, 2010. Approximately 40 people attended the majority of who supported Davis-Besse License Renewal.

NRC License Renewal Audit and Inspection Schedule (2011):

- Scoping and Screening Audit held the week of January 24
 - Aging Management Programs Audit held the weeks of February 14 and 21
 - Environmental Audit held the week of March 7
 - License Renewal Inspection the weeks of April 25 and May 9
- A "Request for Hearing" by public interveners was sent to the NRC to express their concern regarding environmental aspects of the LRA.
 - A public hearing was held at the Ottawa County Courthouse on March 1, 2011, regarding admissibility of the contentions raised by the interveners.
 - The Atomic Safety and Licensing Board Judge will rule on admissibility of the contentions by the end of April.

b. New Areva Reactor Head

The new Reactor Head arrived onsite November 29, 2010.

- c. November 5, 2010 Unanticipated Control Rod Movement/Feedwater Pump Vibration
- At 11:28 a.m. on Friday, Nov. 5, Operations was establishing plant conditions to support replacing a fuse in the Control Rod 3-4 transfer module when the rod, while on its auxiliary power supply, unexpectedly moved from its normal 100-percent withdrawn position to approximately 72-percent withdrawn.
 - Plant operators responded promptly and correctly, entering the abnormal operating procedure for a misaligned control rod and reduced power to 50 percent.
 - Control rod's entire power supply circuit was tested and found to be functioning normally.
 - Following completion of the circuit checks, Rod 3-4 was recovered and realigned with the remaining rods for that Safety Group.
 - The plant was back at 100-percent power by 2:29 a.m., Nov. 9.
 - Additionally, to further improve Control Rod Drive system reliability, a planned outage was completed the weekend of January 8, 2011, to replace power supply components.
- d. Inadvertent Siren Activation January 31, 2011
- On January 31, 2011, at 0849 the Ottawa County Sirens inadvertently sounded due to a link failure between the Ottawa county siren activation touch screen console and the primary siren activation control system.
 - It was determined that the touch screen operation is not a requirement of the system and was removed and replaced with a system which requires a key to enable the system.
 - This action brought the Ottawa County Siren system in line with the remainder of the fleet siren operations.
 - The ability to activate the offsite sirens was never compromised during this event.
3. **Perry Nuclear Power Plant**
- a. Status of Cross-Cutting Areas of Human Performance (Work Plan)
- Topic covered by Mr. Barker was reiterated from FENOC point of view.
- b. Oct. 28 Sodium Hypochlorite Leakage from Underground Piping
- On October 28, 2010, an unexpectedly large decrease in the Service Water System sodium hypochlorite tank level was noted.
 - Walk down of the chlorination systems was performed, valve line-up was verified, no readily identifiable leakage was noticed. The chlorination system was shutdown and isolated.
 - Notifications were made to the appropriate offsite agencies.
 - Personnel are periodically sampling ground water monitoring wells that are in close proximity to the identified piping coupling areas.
 - Hypochlorite has not migrated and remains contained onsite.
 - The Sodium Hypochlorite storage tank is isolated and will remain isolated until repairs are complete. Manual Sodium Hypochlorite additions are being performed as required.
- c. Refueling Outage 13

Scheduled for April 18, 2011 to May 21, 2011

4. FENOC

- a. Japanese Nuclear Plants Earthquake/Tsunami Update
A visual presentation is being provided the day of the meeting.
- b. FENOC Common Dose Assessment Status Update:
 - Installation of the software at Beaver Valley Power Station and Perry Nuclear is scheduled for the year 2011.
 - Proposed procurement of dose assessment software for Davis-Besse Nuclear Power Station in 2012 budget.

Specifications were finalized for the new dose assessment software.

- Actual start date for programming is projected for late April or early May 2011.

c. E-data update

Beaver Valley – Networking software has been procured for the two simulator servers and is being installed. The e-Data web screens are developed and when data is flowing will be tested. Expect the simulators to be available to e-Data on the Production server by June 2011.

Davis-Besse – Simulator data has been used to test the system for both the actual plant and simulator web screens. Questions on how the data is displayed are being resolved with Davis-Besse Emergency Response personnel. The actual plant data screens will be modified when the simulator screens are changed. It is expected that the system will be available in early June 2011. Ohio will continue to use the existing data system for the upcoming Evaluated Exercise.

a. WebEOC

- Fleet EP personnel have complete WEBEOC procedure and have submitted procedure to site ERS personnel for review and comments.
- Fleet EP personnel have complete WebEOC database and trained site ERS personnel on how to use database. They are currently testing database and will submit comments back the Fleet when testing is complete.
- Training modules and an exam bank have been developed to support the implementation schedule. Implementation of WebEOC is being integrated with the development of the new remote EOF/Alternate TSC as a result of pending NRC rule making. It is projected that WebEOC will be implemented fleet wide in early 2012 pending integration with state and local agencies.

END OF REPORT

End of Report Summary: Mr. Collings' report as submitted to URSB is available by contacting the URSB Secretary at 614-889-7150.

Mr. Fred Cayia of First Energy Nuclear Operating Company gave a presentation on the Japanese Nuclear Power Plants Earthquake/Tsunami Update/Iodine 131.

II. Miscellaneous

A. Live Meeting/Video Conference Options

Michael Chesonis from the IT department gave a short presentation to the Board on options of how to widen the audience for the URSB meetings.

Mr. Barker said for an NRC public meeting, anyone can call into the meeting coordinator and get the information to listen in to the meeting.

Ms. O’Claire asked how people are made aware of the meeting.

Mr. Barker said that for the NRC, a meeting notice is posted on the website and public affairs officers in the locale of where the meeting is held will also advertise in the area. The meeting will also be publicized through the state liaison program. That is really an effort to get participation. Their agency has seen a difference even from when Mr. Barker started, in an effort to really get people involved. It is a dedicated effort.

Mr. Halnon stated that from their perspective, it does not matter if it is a public meeting, but to reiterate a FENOC policy, they will not answer questions from the public. They would help the NRC answer, if it was an NRC public meeting. Unless they would start to bring their public information officers and unless it was a straight forward yes/no answer, they would probably decline from answering. The situation would be the same in this meeting-if you had a person ask a question of the utility. Unless it is an easy public answer, they would decline from answering.

Mr. Halnon said that they would collaborate to help answer the questions and would not necessarily take a hard stance. It is difficult because over the phone, you don’t know who you are talking to. Are we trying to solicit information from people or is this just for informational purposes-to keep the public more informed.

Mr. Chesonis said it is important to identify audience and who you would want to attend-would this be the public in the nuclear power plant area, or other state agencies?

Mr. James Mehl asked how much of a demand is there existing for URSB information-do people request copies of the minutes, are there hits on the website, transcript; is there a demand or are we trying to drum up interest>

Ms. O’Claire stated that over the years, when we first held URSB meetings, there was a little more interest. There would be 3-4 people attend from the Citizens Advisory Council and 3-4 members of general public and media attend.

END OF MEETING MINUTES SUMMARY

URSB JOINT INSPECTION OBSERVATION PROGRAM



URSB JOINT INSPECTION OBSERVATION PROGRAM

The Joint Inspection Observation Program (JIOP) was implemented by the Board in April 1991 by adopting URSB Resolution 91-002, “Resolution Adopting General Agreement Between the U.S. Nuclear Regulatory Commission and Ohio’s State Liaison Officer for State Observations of NRC Inspections of Nuclear Power Plants”. The agreement allows URSB JIOP members to observe NRC inspections of PNPP and DBNPS. Under “adjacent state observation” status, a second agreement with NRC Region I allows JIOP participants to observe NRC inspections at the BVPS. A “guidelines document” has been developed setting the conditions and procedures for member agencies’ participation in the program. This document includes the goals and objectives of the JIOP. The URSB JIOP Goals and Objectives are delineated below.

In SFY11 the URSB JIOP participants observed nine NRC inspections. For each observation a report is generated and forwarded to the NRC for its review and comment. The table at the end of this section lists these reports for the past year. All JIOP reports are available to the public by request to the URSB Secretary. Requests may be made by telephone at (614) 889-7150 or in writing to:

URSB Secretary
The Utility Radiological Safety Board
2855 West Dublin Granville Road
Columbus, Ohio 43235-2206

URSB JIOP Goals and Objectives

To observe NRC inspections at Ohio nuclear power facilities and BVPS.

- To participate with the NRC to observe inspections.
- To communicate to the public, URSB member agencies, and interested parties first-hand information obtained by observing inspections, in accordance with NRC protocol.
- To communicate with the NRC resident, regional, and national inspectors.

To raise issues of health, safety, and economic concerns with the Board.

- To observe NRC inspections and obtain timely, first-hand information which will assist in formulating state positions on public health, safety, performance, and/or cost issues.
- To maintain a historical database to monitor the economical production and safe operation of nuclear energy.

To provide the URSB with reports that identify the number of inspections observed during the quarter, summarize observation results and recommendation, and address comments made by the NRC and the public.

JIOP INSPECTIONS SY2011 (July 1, 2010 to June 1, 2011)

JIOP Number	Date(s)	Inspection	Agency
2010-PNPP-02	July 12-16, 2010	Radiation Protection	ODH
2010-DBNPS-05	August 16-20, 2010	95001 Special Inspection	OEMA
2010-DBNPS-06	September 13-17, 2010	Radioactive Waste Processing and Radioactive Material Handling, Storage and Transportation and RETS/ODCM Radiological Effluent Monitoring	ODH
2010-DBNPS-07	November 15-19, 2010	Radioactive Gaseous and Liquid Effluent Treatment and Reactor Coolant System Activity	ODH
2010-DBNPS-08	December 1-3, 2010	Follow-up Supplemental Inspection	OEMA
2010-DBNPS-09	December 13-17, 2010	Radiological Hazard Assessment & Exposure Controls, Occupational ALARA Planning & Controls, Occupational Exposure Control Effectiveness, and Verification of Licensee Responses	
2011-PNPP-01	January 24-28, 2011	Radiation Monitoring Instrumentation, Reactor Coolant System Activity, Occupational Exposure Control Effectiveness, and RETS/ODCM Radiation Effluent	ODH
2011-DBNPS-01	January 24-28, 2011	Radiation Protection	ODH
2011-BVPS-01	March 21-25, 2011	Radiological Hazard Assessment and Exposure Controls, Occupational ALARA Planning and Controls, Occupational Dose Assessment	ODH

FINANCIAL REPORT



DESCRIPTION	SFY07	SFY08	SFY09	SFY10	SFY11
<i>Appropriations</i>					
Emergency Management	\$1,198,319	\$1,434,242	\$1,374,837	\$1,319,926	\$1,381,558
Health	\$793,000	\$815,000	\$835,500	\$850,000	\$850,000
Environmental Protection	\$276,352	\$279,927	\$257,938	\$285,982	\$285,982
Agriculture	\$73,059	\$128,723	\$134,389	\$121,022	\$123,048
Commerce♦					
Public Utilities Commission♦					
<i>Total Appropriation</i>	\$2,340,730	\$2,657,892	\$2,602,664	\$2,576,930	\$2,640,588
<i>Expenditures</i>					
Emergency Management	\$1,202,035	\$1,492,342	\$1,337,042	\$1,028,826	\$995,249
Health	\$721,320	\$789,884	\$836,042	\$850,000	\$850,000
Environmental Protection	\$249,540	\$248,002	\$235,179	\$254,143	\$259,888
Agriculture	\$73,016	\$128,723	\$113,352	\$86,105	\$103,696
Commerce♦					
Public Utilities Commission♦					
Total Expense (Year-end Balance)	\$2,245,911	\$2,658,951	\$2,521,615	\$2,219,074	\$2,208,833

♦ Denotes agency does not receive funding from FENOC

AGENCY OVERVIEWS



OHIO DEPARTMENT OF AGRICULTURE

The Ohio Revised Code directs the Ohio Department of Agriculture (ODA) to protect the food supply as it relates to Food Safety and Animal Health. Additionally, the Code of Federal Regulations directs ODA to promote public safety involving nuclear power plant operations. ODA, in coordination with the United States Department of Agriculture (USDA) and the Ohio State University Cooperative Extension Service, estimates damage to crops and livestock from radiation incidents.

ODA maintains emergency response plans and monitoring programs in order to respond to and mitigate the effects of nuclear incidents. ODA coordinates procedures for the protection and recovery of livestock, poultry, forage and browse plants from radiation effects. ODA reviews and maintains embargo and quarantine procedures for all affected food, agricultural commodities, and livestock within an affected area and for possible outlets for contaminated products.

If an incident occurs, ODA assesses and deals with problems impacting agriculture and its related industries. ODA, in coordination with the Ingestion Zone Recovery and Re-entry Advisory Group (IZRRAG) and the counties involved, determines affected target groups including farmers, food producers, distributors and processors in the ingestion exposure pathway and gives them emergency response information.

Nuclear Power Plant Emergency Planning

ODA attends monthly Utility Radiological Safety Board (URSB) Working Group meetings, Nuclear Emergency Planning Advisory Committee (NEPAC) meetings and After Action Group meetings.

ODA continues to participate in the scheduled IZRRAG meetings to review and revise the Ohio Plan for “Response to Radiation Emergencies at Commercial Nuclear Power Plants” procedures and advisories in preparation for nuclear power plant training, exercises or related emergencies.

ODA attends scheduled Nuclear Emergency Planning Advisory Committee (NEPAC) meetings.

Other Related Items

The Ohio Agriculture Brochure was reviewed and updated by IZRRAG team members in 2010 and was distributed by ODA. The brochure is distributed to Ohio food producers, processors and distributors located within a ten mile radius of a nuclear power plant, and the brochure is made available to counties within a fifty mile radius of those plants. The brochure is also available electronically on the Ohio Department of Agriculture website and via links on URSB member agency sites.

ODA participated in the IZRRAG training conducted on October 18, 2010 and the Tabletop Drill held on November 10, 2010. ODA also participated in the Field Team Center/Sampling Screening Point activities conducted at EMA on October 27, 2010.

OHIO DEPARTMENT OF COMMERCE

DIVISION OF INDUSTRIAL COMPLIANCE & LABOR

The overall mission of the Ohio Department of Commerce (ODC), Division of Industrial Compliance & Labor is to serve Ohio by promoting the safety and soundness of our customer industries through an innovative and effective team of highly motivated employees. The Ohio Department of Commerce is one of the state's chief regulatory agencies. Commerce is different from most state agencies, since it must operate like a private business enterprise as opposed to being funded primarily by Ohio's General Revenue Fund dollars. The agency exists on the fees and assessments from the industries that it regulates.

URSB Involvement

ODC is a member of the Ohio Utility Radiological Safety Board (URSB). ODC is committed to help ensure nuclear safety for the citizens of Ohio by monitoring the Davis-Besse and Perry Nuclear Power Plants quality assurance programs.

Agency Specific Activities

During SFY11, ODC continually monitored the Davis-Besse and Perry Nuclear Power Plants In-service Inspection Program of Nuclear Power Plant Components. Chapter 4101:4-5 of the Ohio Administrative Code mandates this monitoring. In this chapter it refers to Section XI, Rules for In-service Inspection of Nuclear Power Plant Components, of the ASME Boiler and Pressure Vessel Code. This Section provides rules for the examination, testing, and inspection of components and systems in a nuclear power plant.

The rules of this Section constitute requirements to maintain the nuclear power plant and to return the plant to service, following plant outages, in a safe and expeditious manner. The rules require a mandatory program of examinations, testing, and inspections to evidence adequate safety. The rules also stipulate duties of the Authorized Nuclear In-service Inspector to verify that the mandatory program has been completed, permitting the plant to return to service in an expeditious manner.

The Owner of the nuclear power plant is assigned the responsibilities to develop a program, which will demonstrate conformance to the requirements of this Section. These responsibilities include: (a) Provision of access in the design and arrangement of the plant to conduct the examination and tests; (b) development of plans and schedules, including detailed examination and testing procedures for filing with the enforcement and regulatory authorities having jurisdiction at the plant site; (c) conduct of the program of examination and tests, system leakage and hydrostatic pressure tests, as well as in-service tests of pumps and valves; (d) recording of the results of the examinations and tests, including corrective actions required and the actions taken.

Duties of the Authorized Nuclear In-service Inspector are assigned by Section XI to verify that the responsibilities of the Owner and the mandatory requirements of this Section are met. Duties performed this past fiscal year by the Authorized Nuclear In-service Inspectors included: (a) witnessing of pressure tests; (b) reviewed nondestructive examination procedures and repair programs; (c) verified that the visual examinations and tests on pumps and valves had been completed and the results recorded.

Future Activities

The Department Staff will continue to monitor the In-service Inspection Programs of Davis-Besse and Perry Nuclear Power Plants, and will provide technical assistance to the URSB when questions arise regarding the requirements of ASME Section XI.

UTILITY RADIOLOGICAL SAFETY BOARD (URSB)
2011 ANNUAL REPORT

OHIO DEPARTMENT OF HEALTH
DIVISION OF PREVENTION
BUREAU OF RADIATION PROTECTION

Prepared By:



PAMELA, SENIOR HEALTH PHYSICIST
TECHNICAL SUPPORT SECTION

Reviewed & Approved By:



STEPHEN HELMER, PROGRAM ADMINISTRATOR
TECHNICAL SUPPORT SECTION

July 18, 2011

OHIO DEPARTMENT OF HEALTH

The Ohio Department of Health (ODH) provides support to the URSB through its statutory functions in matters of radiation protection. ODH is designated the Ohio radiation control agency in accordance with Ohio Revised Code 3748.02. ODH serves as the lead state agency on all health physics issues within Ohio, monitors the radiological performance of the nuclear power plants, provides emergency response personnel and dose assessment team leadership in the event of a radiological emergency, observes the evaluation of hospitals abilities to treat contaminated injured people, ensures radiological environmental monitoring outside of commercial nuclear power plant boundaries and provides input for URSB Working Group initiatives.

Nuclear Power Plant Emergency Response Exercises

ODH staff fully participates in nuclear power plant exercises. ODH participated in the September 2010 Perry Nuclear Power Plant (PNPP) evaluated exercises & in the May 2011 Davis-Besse Nuclear Power Station (DBNPS) evaluated exercise. ODH provided key personnel to the Executive Room and Dose Assessment Room, as well as liaison positions with the county, the utility, and the Joint Information Center. In preparation, ODH staff attended several training sessions, including: an in-house nuclear power response overview, plant-specific systems training, tabletop exercise, and Field Monitoring Team training. A complete review of State-wide emergency procedures was performed and all ODH procedures were revised.

Ingestion Zone Recovery and Reentry Advisory Group (IZRRAG) training and tabletop were conducted in October and November 2010, respectively.

MS-1 medical drills are routinely observed by ODH staff at designated hospitals inside the 10-mile Emergency Planning Zone. In this fiscal year, ODH staff observed two MS-1 exercises, one at Tri-Point Medical Center and the other at Mercy St. Charles Hospital. These hospitals were adequately prepared to treat an injured individual contaminated with radioactive material.

Utility Radiological Safety Board (URSB) Working Group Activities

ODH staff attended each of the monthly URSB Working Group meetings, the quarterly Nuclear Emergency Planning Advisory Committee (NEPAC) meetings, and maintained a role in URSB After-Action Group meetings. These meetings provide an opportunity to collaborate with URSB member agencies and utility and local government representatives for planning purposes, resolution of common issues, and identification and tracking of corrective actions documented during exercise activities.

ODH regularly collaborates with member agencies and First Energy Nuclear Operating Company (FENOC). Such activities include the presentation of Field Monitoring Team training with OEMA in March 2011, review of the *Ohio Plan for Response to Radiation Emergencies at Commercial Nuclear Power Plants* (REP Plan), participation in the nuclear power training working group, and attendance at the BVPS Tri-State quarterly meetings.

Joint Inspection Observation Program (JIOP)

ODH staff participates with the United States Nuclear Regulatory Commission (NRC) in the Joint Inspection Observation Program (JIOP) inspections. Eight JIOPs covering twenty-six topic areas were completed by ODH staff in the last 12 months. Topics included:

Inspection Topic Areas	Facility	Date
Radiological Hazard Assessment & Exposure Controls	PNPP	July 2010
In-Plant Airborne Radioactivity Control & Mitigation		
Occupational Dose Assessment		
Radiological Environmental Monitoring Program (REMP)		
RETS/ODCM Radiological Effluent		
Rad Solid Waste Processing & RAM Handling/Storage/Transportation	DBNPS	September 2010
RETS/ODCM Radiological Effluent		
Reactor Coolant System Activity	DBNPS	November 2010
Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		
Radiological Hazard Assessment & Exposure Controls	DBNPS	December 2010
Occupational ALARA Planning and Controls		
Occupational Exposure Control Effectiveness		
Verification of Response to NRC Req for Inventory of NSTS Materials		
In-Plant Airborne Radioactivity Control & Mitigation	DBNPS	January 2011
Occupational Dose Assessment		
Reactor Coolant System Activity		
Radiation Monitoring Instrumentation	PNPP	January 2011
Reactor Coolant System Activity		
Occupational Exposure Control Effectiveness		
RETS/ODCM Radiological Effluent		
Radiological Hazard Assessment & Exposure Controls	BVPS	March 2011
Occupational ALARA Planning and Controls		
Occupational Dose Assessment		
Occupational ALARA Planning and Controls	PNPP	May 2011
Special Inspection for ALARA Planning & Controls		
Verification of Response to NRC Req for Inventory of NSTS Materials		

Findings from these inspections may be found on the NRC website. ODH observations during the inspections did not differ significantly from those of NRC.

Midwestern Radioactive Material Transportation Committee

This committee provides a collaborative forum for the states and the Department of Energy (DOE) in the development of policies and procedures for the safe transportation of spent nuclear fuel, transuranic waste, low-level radioactive waste, and highway route controlled quantities of radioactive material. ODH works with OEMA and PUCO in presenting Ohio's position on transportation issues. Each Midwestern state has a gubernatorial and legislative appointee to the committee. Michael Snee, Chief of the ODH Bureau of Radiation Protection, is the gubernatorial appointee to the committee.

Davis-Besse Pressure Vessel Head Repairs

ODH closely monitored the situation regarding the cracking of control rod drive mechanism penetrations at the Davis Besse Nuclear Power Station. ODH staff members observed the NRC's special inspection and attended the public exit meeting for the special inspection.

Perry Nuclear Power Plant ALARA concerns

ODH monitored the situation regarding the ALARA concerns from a dosimetry alarm greater than 20 R/hr at the Perry Nuclear Power Plant. ODH staff members observed the NRC's special inspection.

Radiological Environmental Monitoring Activities

ODH staff oversees offsite radiological environmental monitoring activities at Davis-Besse Nuclear Power Station, Perry Nuclear Power Plant, and Beaver Valley Power Station. Ground water, surface water, potable water, bottom sediment, milk, fish, fruit, vegetable and air samples are collected by independent contractors and local health departments (under contract with ODH) and analyzed by the ODH Laboratory. All sample results indicated that radioactivity levels are at or near the Lower Limit of Detection (LLD) and well below the NRC release criteria.

During the past four quarters calibration verifications of each dry gas meter used for air sampling were performed. Throughout the year equipment turnover included the replacement of 5 pumps, two dry gas meters and two elapsed timers. East Liverpool was the first site to receive the RADeCO AVS-28A rotary vane system that with proper maintenance should outlast the articulating piston type currently in use. This type of pump is consistent with the type currently in use by the utilities and plans are to eventually replace all articulating piston pumps with the rotary vane systems when appropriate. The RADeCO system is equipped with an electronic timer and rotometer that will allow for the removal of the dry gas meter and elapsed timer at each site reducing overall maintenance expenses.

The ODH Annual Environmental Monitoring Report for 2010 is prepared for signature and will be distributed in August 2011.

Other Related Items

A member of the ODH staff was able to participate in the FEMA Region V scheduling conference in November 2010. The conference featured speakers from FEMA Region V, FEMA Headquarters, NRC and various agreement states.

Two members of the ODH staff were able to participate in the National REP Conference in Orlando, FL in April 2011. The conference featured speakers from FEMA, NRC, CRCPD, NEI, FDA, and various states.

OHIO EMERGENCY MANAGEMENT AGENCY

The Ohio Emergency Management Agency (Ohio EMA) was established under Ohio Revised Code Chapter 5502.22 as a division of the Department of Public Safety. The mission of the Ohio EMA is to coordinate activities to mitigate, prepare for, respond to and recover from disasters. Phases of mitigation, preparedness, response and recovery are designed to minimize effects upon the population caused by all hazards. The agency maintains the State Emergency Operation Center, the data links to nuclear power plants, and multiple communications links to Federal, State, and County organizations. The Ohio EMA implements federal and state policies and programs, and supports county emergency management agencies.

The Executive Director of Ohio EMA supervises the day-to-day operations of the agency's professional and technical support personnel and serves as the chair of the URSB.

The Ohio EMA is organized into many branches which work together to accomplish its mission: Radiological, Readiness and Response, Plans, Field Operations, Training & Exercise, Mitigation, Recovery, Grants, Communication, Data Management, Facilities, and Logistics. The Ohio EMA is responsible for Nuclear Power Plant incident response, accident assessment, instrument maintenance, training, planning, exercises and drills, utility, federal, and public interfacing and facilitation of the URSB. In addition, Ohio EMA continues to monitor activities relating to high level radioactive waste, and coordinates the transport of spent fuel and high level radioactive materials across Ohio.

Nuclear Power Plant Exercises and Drills

Ohio EMA is responsible for the coordination of State Agency participation in nuclear power plant exercises. These exercises can take the form of small communications tests involving only State and County EMAs to major federally evaluated exercises.

In SFY2011 there were two federally evaluated exercises:

PERRY NUCLEAR POWER PLANT PARTIAL PARTICIPATION EXERCISE

The 2010 PNPP partial participation exercise was conducted on September 28, 2010. Findings included 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." This ARCA was appealed by OEMA and was rescinded by FEMA. The counties of Lake, Ashtabula, and Geauga did not receive any FEMA findings.

DAVIS-BESSE NUCLEAR POWER STATION PARTIAL PARTICIPATION EXERCISE

The 2011 DBNPS partial participation exercise was conducted on May 10, 2011. Ottawa County was cited for two ARCAs, which were re-demonstrated prior to the conclusion of the exercise. Lucas County

received a single ARCA which was re-demonstrated. There are no open issues moving forward from this exercise.

Drills

Ohio EMA participated with applicable counties in the following integrated drills:

- Perry Nuclear Power Plant:
 - September 7, 2010
 - February 23, 2011
- Beaver Valley Power Station:
 - July 22, 2010
 - August 12, 2010
 - June 29, 2011
- Davis-Besse Nuclear Power Station
 - February 10, 2011
 - March 10, 2011
 - April 5, 2011
 - June 9, 2011
- Field Monitoring Team Drill
 - April 4, 2011

Ingestion Zone Reentry and Recovery Advisory Group Activities:

- IZRRAG training was conducted on October 18, 2010.
- IZRRAG drill including Field Team Center/Sample Screening Point activities and Sampling Practices was conducted on October 27, 2010.
- IZRRAG Tabletop drill was conducted on November 10, 2010.

Nuclear Power Plant Incidents

There was one classifiable event in SFY11 for FENOC plants. Davis Besse Nuclear Power Station declared a Notice of Unusual Event (NOUE) on January 19, 2011, due to an explosion or fire in the Protected Area of the plant. The fire was in a temporary breaker in a construction area which is inside the protected area outside the auxiliary building. The plant continued to operate safely with no unplanned release of radiation.

FEMA Region V Scheduling Conference

Michael Bear attended the Conference held in Chicago Illinois on November 3-5, 2010. Agenda topics of discussion included: FEMA and NRC updates, The 2011 National Level Exercise, Alert and Notification Systems, National and Regional Training Opportunities, Electronic Personal Dosimetry, and RASCAL IV Dose Assessment Software.

Regulatory Updates

Proposed Changes to the Radiological Emergency Planning Documents

The REP Program Manual and NUREG-0654 Supplement IV reviewed in 2009 have not yet been approved and released by FEMA and the NRC.

Changes to NUREG-0654, Supplement 3

NUREG-0654/FEMA-REP-1, Rev. 1, Supplement 3 which was reviewed and comments submitted in 2009 has yet to be approved or released by FEMA and the NRC.

Emergency Planning

Ohio EMA completed the annual revision of The Ohio Plan for Response to Radiation Emergencies at Commercial Nuclear Power Plants in January 2011.

OHIO ENVIRONMENTAL PROTECTION AGENCY

The Ohio Environmental Protection Agency (OEPA) regulates emissions to the environment to ensure clean air, clean water, and the proper disposal of solid and hazardous waste, and enforces management standards in order to protect Ohio citizens and the environment. With regard to the URSB and nuclear power operations, Ohio EPA is charged with applying these standards to the nuclear power plants in Ohio. As the plants are large industrial complexes, OEPA routinely monitors the permitted discharges of the nuclear power plants to ensure compliance with all regulated pollution standards.

The nuclear plants are permitted under the National Pollutant Discharge Elimination System, hazardous waste rules, Air permitting, and chemical storage. Ohio EPA divisions receive regular reports from the nuclear plants on these activities and tracks their performance as with other industries. In addition, OEPA also receives monitoring reports from the plants and from offsite drinking water intakes around the plant to ensure there is no contaminant migration off the plant site in the ground water.

During nuclear power plant exercises, or in the event of an actual incident involving the release of radioactive material, Ohio EPA has a Radiological Assessment Team that has trained to collect environmental samples in affected areas, and who will also take samples in non-affected areas to ensure that the full extent of any contamination is fully understood. These environmental samples, in conjunction with samples collected by other agencies will be analyzed and evaluated. Ohio EPA maintains staff at the State Emergency Operations Center who can provide technical expertise to evaluate these samples and advise local officials and state policy makers regarding the appropriate actions to be taken to protect the public health and well-being.

The Ohio EPA Radiological Assessment Team conducted annual team training September 29, 2010 with both classroom and field evolutions. For 2011 the OEPA RAT teams participated in classroom training and field exercises with Franklin County Emergency Response and Management Agencies in conjunction with a WMD exercise March 9 – 11, 2011.

PUBLIC UTILITIES COMMISSION OF OHIO

The Public Utilities Commission of Ohio

The Public Utilities Commission of Ohio (PUCO) works to assure all residential and business consumers access to adequate, safe and reliable utility services at fair prices, while facilitating an environment that provides competitive choices. The PUCO regulates electric, natural gas, telecommunications, water/wastewater and transportation companies operating in the State of Ohio.

The PUCO Transportation Department

The PUCO Transportation Department works to facilitate safe and secure commercial transportation on public highways, railroads, and at transportation facilities as well as promote quality and equitable service in a proactive manner for the public and commercial carriers in the household goods, bus, and ferryboat industries.

The PUCO Transportation Department is responsible for enforcing state and federal motor carrier and rail safety requirements within the state of Ohio.

Transport of Radioactive Materials – PUCO Regulatory Responsibilities & Capabilities

The Governor has designated the PUCO as the state’s routing agency for radioactive materials and spent nuclear fuel. The PUCO Transportation Department is responsible for the enforcement of federal and state regulations governing the highway and railroad transport of hazardous materials, including radioactive materials. The Transportation Department staff includes fourteen Hazardous Materials Specialists and one supervisor trained to standards prescribed by the United States Department of Transportation (US DOT), the Federal Motor Carrier Safety Administration (FMCSA) and the Commercial Vehicle Safety Alliance (CVSA).

These personnel are certified to conduct inspections of Highway Route Controlled Quantities of radioactive materials shipments using the CVSA Level VI, North American Standard (NAS) Inspection for Radioactive Shipments. The Level VI inspection procedure is limited to radiological shipments and includes inspection procedures of the US DOT/CVSA NAS Level I inspection. The Level VI inspection procedures include US DOT radiological requirements and stringent “out-of-service criteria” for trucks transporting the materials. CVSA Level VI inspections include close examination of the driver, the vehicle, and the radioactive materials packaging and cargo.

Radioactive materials shipments that are not examined under the Level VI process are inspected using the North American Standard Level I procedures. The Federal Motor Carrier Safety Administration requires all Highway Route Controlled Quantities of Class 7 materials, pass a CVSA Level VI inspection as specified in 49 CFR 385.415(b)(1).

Also, several PUCO Transportation Department personnel are certified by the US DOT Federal Railroad Administration (FRA) to inspect rail shipments of radioactive materials. Along with checking for compliance with the US DOT Hazardous Materials Regulations, these PUCO personnel are also FRA certified to inspect rail equipment, track, and operating practices.

When encountered in transportation, PUCO HM Specialists regularly inspect packaging of Class 7 materials that are not subject to the CVSA Level VI inspection criteria. These inspections include a radiological survey. These personnel are also trained in radiological decontamination and control procedures found in 49 CFR 173.443. PUCO personnel often work very closely with Ohio EMA and ODH personnel to coordinate and conduct inspections of high level and special interest radioactive materials shipments. This includes radioactive industrial sources, shipments of radioactive waste from the decommissioning of US DOE facilities in Ohio as well as containers of depleted Uranium Hexafluoride (UF6) in transit from Oak Ridge, TN to the US DOE Piketon, OH facility. PUCO personnel inspect and escort all US DOT regulated Highway Route Controlled Quantities (HRCQ) and as applicable Quantities of Concern (QC) shipments that enter or travel through Ohio.

NUCLEAR POWER PLANT ACTIVITIES



BEAVER VALLEY NUCLEAR POWER STATION



The Beaver Valley Power Station (BVPS) is located in Shippingport, Pennsylvania on the Ohio River approximately 5 miles from the Ohio border. The plant is a two-reactor site, with Unit 1 commencing operation in October 1976 and Unit 2 in November 1987. Beaver Valley Unit 1 and Unit 2 are owned and operated by First Energy Nuclear Operating Company (FENOC).

The plant operated safely and reliably during the year.

1. Unit 1 outage (1R20) Oct 2, 2010 thru Nov 4, 2010 (33days, 4 hrs, 49 min)

Projects and maintenance items completed during the outage include:

- “B” Reactor Coolant Pump seal inspection and motor replacement
- Polar Crane power rail inspections and repairs
- “B” Control Rod Drive Mechanism fan motor replacement.
- Replacement of the entire annular rail system which supports the containment polar crane is scheduled for the 1R21 refueling outage in 2012.
- Top of Reactor Head inspections (completed with no issues identified)
- Containment Liner and Coatings inspections
- “B” Residual Heat Removal pump seal replacement and check valve inspections.
- Containment piping insulation remediation.
- Steam Generator secondary side inspections and cleaning
- “B” Steam Generator steam dome inspections
- No. 1-1 Battery replacement
- Plant computer replacement
- Diesel Generators 18 month preventative maintenance

Fuel and Outage Performance: Unit 1 has operated for more than five years without experiencing a fuel defect. Unit 1’s next scheduled refueling and maintenance outage is planned for spring 2012.

Complete Core Offload was completed safely and event free in 42 hours which is the best for BVPS Unit 1 and was top industry quartile performance.

Dose, Personnel Contamination Events (PCE's) and Safety Performance:

- Radiation Dose utilized during 1R20 was 53.6 REM against an outage goal of 59 REM.
- The outage goal for PCE's was established at 29 or less during 1R20, the final number recorded was 14.
- Most importantly, there were no OSHA reportable accidents or lost time accidents for the outage and 2 minor first aids.

2. Unit 2 outage (2R15) March 7, 2011 thru April 11, 2011 (34 days, 23 hrs, 44 min)

Projects and maintenance items completed during the outage include:

- Reactor Head Control Rod Drive Mechanism (CRDM) nozzle penetration weld inspections and repairs (one nozzle needed a minor repair)
- Steam Generator secondary side inspections and cleaning
- "A" and "B" Reactor Coolant Pump seal inspections and replacements
- Containment Air Recirculation fan motor and rotating assembly replacements
- "B" CRDM fan motor replacements
- Containment Liner inspections
- Cooling Tower inspections and repairs
- Main Unit Generator disassembly and inspections (including Rotor removal)
- Emergency Switchgear Fan Replacement
- 2-1 Battery Replacement (60 cells)
- Diesel Generators 18 month preventative maintenance
- "B" Containment recirculation spray heat exchanger secondary side cleaning (gaining margin should it be needed during an accident)

Dose, Personnel Contamination Events (PCE's) and Safety Performance:

- Radiation Dose utilized during 2R15 was 70.8 REM against an outage goal of 75 REM.
- The outage goal for PCE's was established at 25 or less during 2R15, the final number recorded was 21 PCE's.
- Most importantly, there were no OSHA reportable accidents or lost time accidents for the outage and 3 minor first aids.

3. Initial Notification Form

On June 8th 2011 Beaver Valley implemented a new fleet standard Initial Notification Form. This form is a simplified, streamlined, single page form that will be provided manually in the same manner as current procedures dictate. Training for the onsite personnel who use the form was conducted and applicable offsite stakeholders were included in the change management for this initiative.

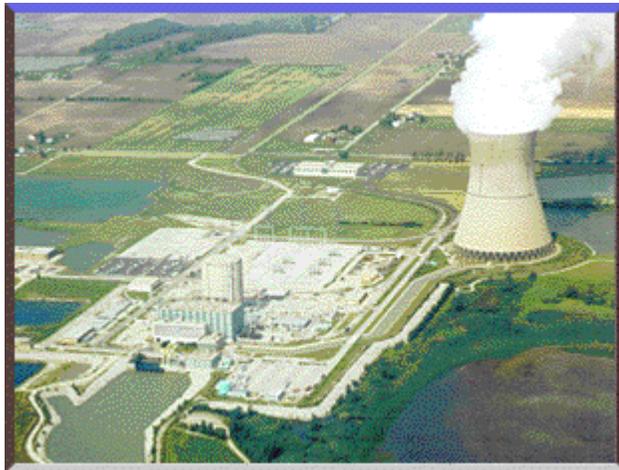
4. Siren upgrade project

Beaver Valley is currently in the final stage of its siren upgrade project which will finish in September 2011. At the conclusion of the project the 119 Alert and Notification System sirens will have been replaced and have battery backup capability in order to ensure continued functionality in the event of a loss of power.

5. Spent Fuel Re-Rack Project

The project engineering phase began in November 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 was scheduled for 2011.

DAVIS-BESSE NUCLEAR POWER STATION



FirstEnergy Nuclear Operating Company's Davis-Besse Nuclear Power Station, is near Oak Harbor, Ohio in Ottawa County. The plant is owned by FirstEnergy and operated by the FirstEnergy Nuclear Operating Company (FENOC).

The station operated safely and reliably during the year.

1. Evaluated Exercise (results based upon regulator debriefs) Emergency Response Organization (May 10, 2011)

Performance in the 2011 evaluated exercise demonstrated that Davis-Besse 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 FENOC received a critical review of our performance.

Off site response organizations (May 9 - 11, 2011)

- State of Ohio – No Deficiencies were identified for the State of Ohio. No Areas Requiring Corrective Action (ARCA) were identified. One new Planning Issue was identified. One Planning Issue from a previous exercise (Perry NPP) for the State was resolved.
- Lucas County – No Deficiencies were Identified for Lucas County. One ARCA was identified and successfully re-demonstrated. No Planning Issues were identified.
- Ottawa County – No Deficiencies were Identified for Ottawa County. Two ARCAs were identified and successfully re-demonstrated. No Planning Issues were identified.

2. License Renewal

License Renewal Application (LRA) was submitted to Nuclear Regulatory Commission (NRC) on August 30, 2010. NRC confirmed that the LRA was "sufficient for docketing" in October, and started their review process. An Environmental Public Meeting was held November 4, 2010. Approximately 40 people attended with the majority supporting Davis-Besse License Renewal. NRC License Renewal Audit and Inspection Schedule:

- Scoping and Screening Audit the week of January 24, 2011
- Aging Equipment Management Programs Audit the weeks of February 14 and 21, 2011
- Environmental Audit the week of March 7, 2011
- License Renewal Inspection in April 2011

A "Request for Hearing" by public advocates was sent to the NRC to express their concern regarding environmental aspects of the LRA. FENOC Legal prepared a response to the request. NRC began sending License Renewal "requests for additional information" (RAIs) in January 2011. Strong site support is being provided to ensure successful License Renewal Audits and Inspections

3. 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. The scope was FENOC's identification of flaws in Davis-Besse's Reactor Pressure Vessel Head Control Rod Drive Mechanisms (CRDMs) and the process used by FENOC to repair the indications. 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 develop corrective actions.

4. Reactor Vessel Head replacement

The new Reactor Vessel Head was received at the site on November 29, 2010. The Reactor Head fabrication was performed at Areva's heavy equipment fabrication facility in Chalon, France. A series of acceptance testing was completed on the new head during manufacturing, which included radiography testing and dye penetrant testing (PT) to verify the Control Rod Drive Mechanism (CRDM) weld integrity of the head for certification and qualification.

The original plans were to install the new head during Davis-Besse's 2014 refueling outage when the Steam Generators are scheduled to be replaced. However, Davis-Besse made a commitment to the NRC to accelerate replacing the head from the spring 2014 to October 1, 2011, following a series of modifications on the existing head during the site's recent 16th refueling outage held in the spring of 2010.

The new Reactor Vessel Head was moved from the temporary storage facility to the new Temporary Assembly Building (TAB) during the week of 7/5/11 where it was stored since November 2010. The head was modified for a new continuous vent line, has the new Integrated Head Assembly that is in its final fabrication stages installed, and 61 new Control Rod Drive Mechanisms installed as part of the preparations for installation in October. Activities are on schedule to have the new Reactor Vessel Head and Integrated Head Assembly ready to support installation.

5. Inadvertent Siren Activation January 31, 2011

On January 31, 2011, at 0849 the Ottawa County Sirens inadvertently sounded due to a link failure between the Ottawa county siren activation touch screen console and the primary siren activation control system. It was determined that the touch screen operation is not a requirement of the system and was removed and replaced with a system which requires a key to enable the system. This action brought the Ottawa County Siren system inline with the remainder of the fleet siren operations. Ottawa County was the only location in the FENOC fleet that utilized a touch screen computer for siren activation. The ability to activate the offsite sirens was never compromised during this event. The system has been modified to eliminate the touch screen capability which was identified as the cause of the issue. No additional problems have been noted since the change.

6. Update Groundwater Sample Results

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 recommends sampling GPI wells on a six-month frequency. The station has noted elevated tritium levels in wells on site used to monitor groundwater. Monthly samples of the six wells of interest in the Protected Area all have results less than 2,000 pCi/l in October, November and December of 2010. December samples showed the highest tritium level at well location MW-105A at a concentration of 1,319 pCi/l. In addition to the increased sampling frequency, transducers were

installed in several wells to trend groundwater elevation and temperature, and an evaluation of this and the groundwater sampling data was evaluated by an independent laboratory.

The Problem-solving team discussed additional actions to proceed to locate the source of the tritium. The station determined in March 2011 the cause for elevated tritium in Davis-Besse sampling wells was from a valve mis-positioning which allowed secondary steam/condensate containing tritium to enter the storm sewer system. This condition existed for more than 2 months before it was discovered. A short time after the valve was closed and the source of tritium was stopped, the tritium in the wells began and continues to decrease. Normal semi-annual sampling will take place again in September 2011, and the 5 additional wells of interest will be included to verify the continued downward tritium trend. Corrective Actions included actions to heighten the awareness of operators and supervisors when work has the potential to release water containing tritium. Included in the actions were training and an evaluation by Operations of ways to better control work processes.

Perry Nuclear Power Plant



The Perry Nuclear Power Plant (PNPP) located on the shores of Lake Erie in Lake County, approximately 35 miles northeast of Cleveland, began commercial operation in November 1987. The plant is owned and operated by First Energy Nuclear Operating Company (FENOC).

PNPP is a single unit General Electric boiling water reactor (BWR). A BWR is designed to use the steam that is produced inside the reactor to drive the turbine generators. Under ideal conditions, PNPP is capable of producing enough electricity to power 1,220,360 homes in an average month.

The plant operated safely and reliably during the year.

1. Refueling Outage Summary (1R13)

Commenced April 18, 2011 @0001

Completed June 7, 2011 @ 0035

Total dose during the Outage was 262 Rem, (goal of 260 Rem). A total of 1462 work orders were completed during the Outage. Major work activities improving the Plant reliability included:

- Rewound Main Generator Stator
- Replaced “A” Reactor Feed Pump Turbine Rotor
- Replaced 6 Local Power Range Monitor Dry Tubes
- Replaced 10 Control Rod Blades
- Replaced 19 Control Rod Drive Mechanisms
- Replaced 2 Drywell Air Cooling Fans

- Replaced Source Range Monitor “C” Detector
- Replaced Source Range Monitor “B” & “C” cabling
- Overhauled Division 2 Emergency Diesel Engine
- Replaced an Extraction Steam Manifold Header
- Replaced “A” Reactor Feed Booster Pump Motor
- Replaced “A” Reactor Recirculation Pump Seal

2. September 28, 2010 Evaluated Exercise results (based upon regulator debrief)

A. Emergency Response Organization

Performance in the 2010 evaluated exercise demonstrated that 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.

B. Offsite response organization

- 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 and later determined to not be an issue.
- Lake County – 23 of 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.
- Geauga County – 15 of 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.
- Ashtabula – 19 of 19 objectives selected were satisfactorily demonstrated. One Planning Issue was debriefed.

C. 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 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 radioactive material 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 the sampling routine to provide quicker and more precise identification of low level radioactive material transport.

D. Sodium Hypochlorite Leakage from Underground Piping

On October 28, 2010, an unexpected decrease in the Service Water System sodium hypochlorite tank level was noted by the chemistry technician performing the daily chlorination evolutions. Walk down of the chlorination systems was performed and the valve line-up was verified to be correct and no readily identifiable leakage was noticed. The chlorination system was shutdown and isolated. Notifications were made to the appropriate offsite agencies. Subsequent investigation of the decrease in tank level included excavating a previously repaired underground pipe. This piping was found intact. Additional areas of vulnerability were identified and excavated. Remediation activities continue consisting of soil excavation, inspection of all pipe couplings and repair of chlorination piping, and neutralization of contaminated soil. Personnel also periodically sampled ground water monitoring wells that are in close proximity to the identified piping coupling areas. Results from the monitoring wells indicate that the hypochlorite had not migrated and remained contained onsite. The Sodium Hypochlorite storage tank remained isolated while repairs were completed. Manual Sodium Hypochlorite additions were performed as required.

The Hypochlorite system was returned to a normal in-service alignment in July 2011 following replacement of the existing piping.

E. NRC Special Inspection – Source Range Monitor Removal

a. **Root Cause Analysis** - Failure to recognize the risk associated with Source Range Monitor Detector C removal as evident by the less than adequate preparation, review, procedural guidance, and job performance actions to address an unknown, high dose rate condition. The potential dose rate from the Source Range Monitor being stuck in the core at power operations was not accurately estimated. The resultant review and controls established in the detector removal procedure, Order, ALARA Plan, ALARA Action Plan, RWP, and associated briefings were insufficient to address the dose rates seen from the Source Range Monitor.

b. Corrective Actions

- i. Prevent Recurrence Action 1 - Revise NOP-OP-4107, "Radiation Work Permit (RWP)" to require that the following actions are taken when removing an incore nuclear instrumentation detector:
 - Request a dose rate assessment, via calculations or decay curve, for estimation of potential dose rates.
 - Until actual dose rates are determined for incore detectors, require that engineering or administrative controls be established to prevent unplanned over exposures or unexpected dose rate conditions.
 - Incore probes shall not be removed within 48 hours of insertion in a neutron field.

- ii. Prevent Recurrence Action 2 - Revise NOP-WM-1001, "Order Planning Process" to provide guidance on performing a dose rate assessment, via calculation or decay curve, and establishing engineering or administrative controls when the work activity involves removal of a Nuclear Instrument Detector (Incore & Excore).

- iii. Prevent Recurrence Action 3 - Revise the procedural guidance in IMI-E2-0028 to address a detector stuck in the core. Include the following issues:
 - Ensure a dose rate calculation or decay curve is completed.
 - Ensure the disposal cask is sufficient for the potential dose rate.
 - Perform the evolution from the carousel location.
 - Establish conservative controls on withdrawal rate and set appropriate stopping points to check for dose rate changes.
 - Establish the locations and equipment to be used to measure for any dose rate changes.
 - Consider workers egress paths when setting up work locations.
 - Discuss immediate actions needed to place the equipment in a safe condition; i.e. when removing the cable by hand, reinsert the detector cable if higher than expected dose rates are seen.
 - Clarify the directions for installing the take up reel cartridge in the disposal cask to ensure proper orientation.

- Clarify the directions for cutting the 9 feet of cable and provide a recommended method for measuring the cable length to be cut.
- Include cautions or radiological hold points immediately prior to steps that could cause a significant increase in work area dose rates based on industry best practice guidance.

F. Independent Spent Fuel Storage

Project delays have resulted in the loss of PNPP full core offload capability following the completion of RFO13. The project schedule is delayed as a result of some design configuration issues and a few outstanding NRC Region III inspection concerns. The project team continues to work with the NRC Region III inspectors to satisfactorily resolve the open inspection items. Engineering calculations are being finalized to resolve the NRC's questions in parallel with work on a design modification to add some additional seismic restraints for additional margin. The schedule to provide the NRC the supporting calculations is the end of September, 2011. The final pad design inspection includes three findings and non-cited violations. A meeting is tentatively planned for October with the Regional Administrator to address the issues going forward and the approach to eliminate restraints by conducting a seismic stability analysis using an NRC approved methodology within the Perry licensing and design bases. Analysis work is ongoing to support this activity. It is anticipated that a dry run and NRC inspection in spring of 2012 and then the commence a dry cask storage campaign in early summer of 2012.

G. Cross-Cutting Issue- Human Performance

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. Although the total number of findings decreased, a cross-cutting theme in the human performance area was identified based on four findings with a cross-cutting aspect of work planning ((H.3 (a) (work control - planning)). However, because of the progress made in other areas, the NRC closed the cross-cutting themes in human error prevention techniques (H.4 (a)) and work oversight (H.4(c)). Additionally, the NRC closed the substantive cross-cutting issue in the Problem Identification and Resolution (PI&R) area, specifically, in the cross-cutting theme of corrective action program evaluation/extent of condition (P.1(c)) because of demonstrated positive, sustainable improvement in the PI&R area.

The current Perry Nuclear Power Plant (PNPP) status in regards to the Nuclear Regulatory Commission (NRC) Reactor Oversight Process is as follows (from the NRC's Annual Assessment Letter dated March 4, 2011):

“The PNPP operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the assessment period (2010) 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 Performance Indicators indicating performance at a level requiring no additional NRC oversight (Green). The next NRC update is expected in the mid-cycle assessment letter, which should be issued in early September 2011, and will address plant performance through June 30, 2011. The mid-cycle assessment

letter will encompass the results of the special inspection for the Source Range Monitor 'C' detector removal issue.

For the assessment period from January 1, 2010, through December 31, 2010, the total number of inspection findings with documented cross-cutting aspects remained constant at 14. Performance at PNPP continued to exhibit weaknesses in the area of human performance. The NRC's assessment of the findings identified an additional cross-cutting theme in the human performance area, based on four findings with a cross-cutting aspect of documentation/procedures (H.2(c)). In addition, while the number of findings in the work planning (H.3 (a)) cross-cutting aspect decreased from four to three, the NRC concluded it was apparent that actions to date have not resulted in sustainable positive improvement in the area of work planning."

Additionally, in the Annual Assessment Letter, the NRC stated, in part, "Prior to the 2011 mid-cycle assessment, the NRC will conduct an inspection of the long-standing, human performance substantive cross-cutting issue, beyond the baseline inspection program." On June 7, 2011, the PNPP responded to the NRC, and stated that the PNPP has developed and taken action to address shortfalls in human performance, specifically in the area of work planning (H.3a). However, several human performance shortfalls were experienced in the recent refueling outage that warrants further review, evaluation and corrective measures. A common cause analysis assessment of human performance issues was performed at the conclusion of the refueling outage. The common cause analysis identified performance shortfalls and recommended additional corrective actions to further strengthen PNPP's human performance. Additionally, the PNPP requested that the NRC retarget the inspection activities described in the March 4, 2011, letter until just prior to the 2011 end-of-cycle assessment in the late November to early December time frame.

FirstEnergy Fleet Emergency Preparedness

Fleet indicatives and projects

1. Emergency Operations Facilities (EOFs) and Alternate Technical Support Facilities (TSCs)

Three new EOF/Alternate TSCs are being constructed to address soon to be issued NRC rule making. Additionally, the facilities will be a major improvement to existing facilities utilizing advance technology. The facilities are located outside the 10 mile emergency planning zones. Construction has been started at the three sites and is scheduled to be completed and ready for use by early 2012.

2. Common dose assessment project

A common dose assessment program is being developed to replace the existing programs at the stations. Common training and qualifications are also being developed. This program is being developed concurrent with the development of new EOF/Alternate TSC facilities. The program has been written and is now being interfaced with the three site computer systems to allow auto-population of the data. Testing is scheduled to begin in the fall of 2011 with full implementation concurrent with moving into the new facilities in early 2012.

3. WebEOC communications project

WebEOC is a vendor supplied product to allow real time communications between facilities via internet connections. The Fleet has been developing the various screens to be used and is in final testing of the product. A standard format Initial Notification form has been developed as a part of this project and has been rolled out at Beaver Valley. The other two stations will follow in the coming weeks. Electronic transmittal of Notification forms to the states and counties will become the primary method with fax capability remaining as a back up method. Common training has been developed and is being given across the fleet. Full implementation of the product will be concurrent with moving in to the new EOF/Alternate TSC facilities in early 2012.