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REPORT FROM THE CHAIRMAN
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 2012 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.

This year the Utility Radiological Safety Board began rotating the quarterly meetings between Columbus and locally in the three nuclear power plant areas, leading to broader public and industry participation.

The 2012 Beaver Valley Power Station partial participation exercise was conducted on the week of June 19, 2012. There were no findings for either the State or for Columbiana County during this exercise. Columbiana County successfully re-demonstrated an Area Requiring Corrective Action (ARCA) from their previous exercise in 2010. There are no issues carried forward for either agency.

There was one classifiable event in State Fiscal Year 2012 (SFY12) for First Energy Nuclear Operating Company (FENOC) plants. Davis Besse Nuclear Power Station declared an Alert on November 16th, 2011 due to a fire in an electrical bus supplying Safety Related Equipment. The fire was caused by water spraying onto a breaker in the Auxiliary Building. The plant was shut down for a planned maintenance outage at the time, and there was no threat to public safety.

An event that was not classifiable, but that was of particular public interest was the discovery of tight laminar cracks in the concrete of the Davis Besse Nuclear Power Station Reactor Shield Building. The cracking was discovered when workers cut through the building for the installation of a new reactor head assembly. The URSB closely monitored this situation working with both the NRC and FENOC through the entire: discovery, investigation, root cause analysis, and remediation process. The cracking does not affect the plant’s ability to operate safely.

The URSB continues to closely monitor nuclear power issues that could have a direct effect on Ohio’s nuclear utilities and the safety of Ohio’s citizens.

I encourage your review of the many specific activities of the URSB and its member agencies contained in the enclosed overviews.

Sincerely,

[Signature]

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 SFY12 and their respective designees are listed below:

Ohio Department of Agriculture
Mr. David T. Daniels, Director
Mr. Charles Kirchner, Designee

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

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

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

Ohio Environmental Protection Agency
Mr. Scott J. Nally, Director
Mr. Kevin Clouse, Designee

Public Utilities Commission of Ohio
Mr. Todd A. Snitchler, Chairman
Mr. Daniel Fisher, Designee
URSB ACTIONS AND ACTIVITIES
SUMMARY OF URSB ACTIONS AND ACTIVITIES:

Statutory Meetings:


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

July 11, 2011 Statutory Meeting:

UTILITY RADIOLOGICAL SAFETY BOARD OF OHIO
MEETING MINUTES
JULY 11, 2011

Ms. Nancy Dragani, Ohio Emergency Management Agency, called to order the July 11, 2011 meeting of the Utility Radiological Safety Board of Ohio at 1:32 p.m.

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

I. ROLL CALL

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<tr>
<th>EMERGENCY MANAGEMENT AGENCY</th>
<th>MS. NANCY DRAGANI</th>
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<tr>
<td>DEPARTMENT OF HEALTH</td>
<td>MR. MICHAEL SNEE</td>
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<tr>
<td>DEPARTMENT OF COMMERCE</td>
<td>MR. DEAN JAGGER</td>
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</table>

A quorum was declared.

II. READING OF THE APRIL 11, 2011 MINUTES (ADOPTED)

The Board dispensed with reading of the April 11, 2011 minutes. Director Dragani asked for any additions, corrections or deletions to the minutes. Director Dragani asked for a motion to approve the minutes. Ms. Cindy Hafner of the Environmental Protection Agency moved to adopt the minutes and Mr. Chuck Kirchner of the Ohio Department of Agriculture seconded. The motion carried.

III. OLD BUSINESS

A. Updated Status of the URSB Initiatives

Mr. Michael Bear of the Ohio Emergency Management Agency reviewed the URSB initiatives, including the Perry Nuclear Power Plant Cross-Cutting Human Performance Issues, the Davis-Besse Nuclear Power Station Exercise, After Action Plan Activities, IZRRAG activities, Reactor Oversight Program for Davis-Besse Nuclear Power Station, Beaver Valley Power Station and Perry Nuclear Power Plant, Technology, State Dose Assessment, KI, REP Guidance and NRC Rulemaking, Procedural Review, and the Joint Inspection Observation Program.
Director Dragani commented that as we migrate from the REP stand-alone plan to the integration of the plan into the State EOP that we make sure that we do not lose the valuable information in the REP plan. Mr. Tim Clark stated that no information will be removed, but all information will be in the EOP, the Incident Annex or the Operations Manual.

B. Midwestern Committee Report

Mr. Michael Snee of the Ohio Department of Health reported that the Midwestern Radioactive Materials Transportation Committee met on May 10 in Denver in conjunction with the National Transportation Stakeholders Forum. Mr. Dan Fisher of PUCO and Mr. Snee attended the meeting. The minutes of the meeting are published on the Council of State Government’s website for those who are interested. If there are any questions, please feel free to contact Mr. Snee. One note is on June 10, the Committee issued their comments on the draft report of the Blue Ribbon Commission restoring transportation of spent nuclear fuel high-level waste. The final document is expected at the end of July. The committee is making seven recommendations, including looking at building a facility for spent nuclear fuel, since the Yucca Mountain project seems to be defunct.

IV. NEW BUSINESS

A. Resolution 2011-01, Thanking Carol O’Claire for her service to the Board

Ms. O’Claire retired on May 31, 2011 and this is a resolution expressing our appreciation for her service to the board. Director Dragani entertained a motion to approve the resolution. Mr. Dan Fisher of PUCO approved the motion and Mr. Mike Snee of the Ohio Department of Health seconded the motion. The motion passed.

B. URSB Working Group Quarterly Reports

Each of the participating URSB Working Group agencies provided a report of their respective state agency activities. Each agency’s report is available upon request from the URSB Secretary.

C. Nuclear Regulatory Commission

Mr. Allan Barker of the Nuclear Regulatory Commission reported on the following topics: oversight of FENOC Plants, Update of the Davis-Besse License Renewal, NRC Temporary Instruction 2515/183-“Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event, and the Special Inspection, Perry Nuclear Power Plant.

Mr. Barker’s report to the Board is available upon request from the URSB Secretary.

D. Federal Emergency Management Agency

Mr. Dwaine Warren of the Federal Emergency Management Agency, Region V, provided a FEMA Region V Update.

General discussion topics included future increased FEMA and federal participation, exercise activities, evacuation issues, staffing updates and training courses.
E. Utility Reports

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

1. Beaver Valley Power Station
2. Davis-Besse Nuclear Power Station
3. Perry Nuclear Power Plant
4. FENOC

General discussion topics included the Siren Self-Assessment for Beaver Valley Power Station, the License renewal status, the reactor head replacement update and the Tritium leak from March 29, 2011 for Davis-Besse Nuclear Power Station and the Refueling outage summary, the status of cross-cutting areas of human performance and the NRC special inspections-Source Range Monitor Removal from Reactor Core for Perry Nuclear Power Plant.

Mr. Collings’ report to the Board is available upon request from the URSB Secretary.

V. MISCELLANEOUS

A. Rotation of the URSB Statutory Meeting locations

There was a discussion regarding rotating the location URSB Statutory meetings to locations in each of the nuclear power plant counties. This is in an attempt to generate more local interest, as the meeting will be closer to the plants and with this change, the public participation in the meetings will increase. The January meeting would be held at Ohio EMA and the other three meetings in the year would be in the field. Plant personnel would be able to attend the meetings, along with subject matter experts. Further discussion of this topic will take place at the October Board meeting.

B. Next Meeting

The next meeting of the URSB will be on October 11, 2011 at 1:30 p.m.

VI. ADJOURNMENT

Director Dragani asked if there was a motion to adjourn. Mr. Dan Fisher, PUCO, motioned to adjourn the meeting at 3:30 p.m. Ms. Cindy Hafner of the Environmental Protection Agency seconded the motion. The motion carried.
October 11, 2011 Statutory Meeting Summary:

UTILITY RADIOLOGICAL SAFETY BOARD OF OHIO
MEETING MINUTES
OCTOBER 11, 2011

Ms. Nancy Dragani, Ohio Emergency Management Agency, called to order the October 11, 2011 meeting of the Utility Radiological Safety Board at 1:30 p.m.

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

I. ROLL CALL

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<thead>
<tr>
<th>Organization</th>
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<tr>
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<td>DEPARTMENT OF COMMERCE</td>
<td>MR. DEAN JAGGER</td>
</tr>
</tbody>
</table>

A quorum was declared.

II. READING OF THE JULY 11, 2011 MINUTES

The board dispensed with the reading of the July 11, 2011 minutes. Director Dragani asked for any additions, corrections or deletions to the minutes. Director Dragani asked for a motion to approve the minutes. Mr. Michael Snee of the Department of Health moved to adopt the minutes and Mr. Dan Fisher of the Public Utilities Commission seconded. The motion carried.

III. OLD BUSINESS

A. Updated Status of the URSB Initiatives

Mr. Michael Bear of the Ohio Emergency Management Agency and Mr. Steve Helmer of the Department of Health reviewed the URSB initiatives, including the Perry Nuclear Power Plant Cross-Cutting Issues, After Action Plan Activities, IZRRAG Activities, Reactor Oversight Program, Technology, State Dose Assessment, KI, REP Guidance and NRC Rulemaking, Procedural Review, and JIOPs.

Director Dragani asked if there was an approximate timeline for when the public workshops would be held that would discuss the implementation of the new rules. Mr. Bear replied that Mr. Dwaine Warren of FEMA, would have some information on this in his report.

B. Midwestern Committee Report

Mr. Michael Snee reported that the Midwestern Radioactive Materials Transportation Committee has not met since the last URSB meeting. The next meeting will be held in December in Carlsbad, New Mexico.
IV. NEW BUSINESS

A. URSB Working Group Quarterly Reports

Each of the participating URSB Working Group agencies provided a report of their respective state agency activities. Each agency’s report is available upon request from the URSB Secretary.

B. Nuclear Regulatory Commission

Mr. Harral Logaras of the Nuclear Regulatory Commission reported on the following topics: oversight of the FENOC Plants, Update on the Davis-Besse License Renewal and Status of Emergency Preparedness Rulemaking.

Mr. Logaras’s report to the Board is available upon request from the URSB Secretary.

C. Federal Emergency Management Agency


D. Utility Reports

Mr. Fred Cayia, Director of Fleet Performance Improvement for FENOC, attended the meeting with Mr. Rick Collings. Mr. Collings of First Emergency Nuclear Operating Company provided the utility report updates on:

1. Beaver Valley Power Station
2. Davis-Besse Nuclear Power Station
3. Perry Nuclear Power Plant
4. FENOC

Specific topics of discussion included the BVPS siren replacement update, the DBNPS license renewal status and the reactor head replacement update, the PNPP status of cross-cutting areas of human performance and the NRC mid-cycle performance review letter, degraded cornerstone column. Specific topics of discussion for FENOC included the common dose assessment update, an e-data update, WebEOC and the new emergency operations facilities/technical support centers.

Mr. Collings report to the Board is available upon request from the URSB Secretary.
V. MISCELLANEOUS

A. Rotation of the URSB Statutory Meeting

At the last meeting, the idea of rotating the site of the URSB meetings was discussed. The first meeting of the year would be held at Ohio EMA in Columbus, and the other three meetings would rotate to the three power plant areas in order to generate more public input for the meetings and give plant personnel the chance to attend the meetings. Mr. Ricky Collings said that the new EOFs could accommodate the meetings with room space and technology needs. The EOFs are off-site, so security into plant areas would not be an issue, and FENOC would be glad to let the URSB use the facilities, except for BVPS, of which we would need to find a location in Ohio. Other state buildings (DOT regional offices, OSHP, EPA buildings) could be available for use. These meetings would need to be open to the public, so the location would have to be a public building. The Board was in agreement that there is great value in holding these meetings closer to the power plant areas. FENOC personnel also said that they would be glad to set up a tour for state agency staff members. It will need to be very clearly apparent in the public notice of each meeting that the meeting location will not be at EMA and clearly indicate where the meeting will be. Once we identify where we will go, local county officials and local media should be contacted to publicize the meeting. All Board members would need to physically be at the location where the meeting is being held—the quorum has to be present personally. If Board members participate by teleconference, their vote would not count. However, teleconference capabilities will be available for others to participate.

B. 2012 Meeting Dates

The URSB January meeting was originally scheduled for January 9th. However, FEMA’s scheduling conference will be held starting on January 9th, which will most likely be a travel day. The meeting will be moved to January 17th. The subsequent 2012 URSB Statutory meeting dates are: April 9, July 9 and October 9.

C. Approval of the URSB Annual Report

The Annual Report was sent out via e-mail to the Board members last week. Mr. Michael Snee asked if there were any corrections, deletions or any problems noted.

Mr. Michael Snee, Ohio Department of Health, asked for a motion to approve the URSB Annual Report. Mr. Dean Jagger of the Department of Commerce motioned to approve the report and Ms. Cindy Hafner seconded. The motion carried.

One item of new business was noted. Tammy Little, Legal Representative for the URSB, introduced Ms. Hilary Damaser, Senior Assistant Attorney General, who will be taking Ms. Little’s seat on the Board for future meetings. Ms. Damaser’s e-mail address is Hilary.damaser@ohioattorneygeneral.gov and her phone number is 614-466-2980.
VI. ADJOURNMENT

Mr. Michael Snee, Ohio Department of Health asked if there was a motion to adjourn the meeting. Mr. Chuck Kirchner, Ohio Department of Agriculture, motioned to adjourn the meeting, and Mr. Dan Fisher of the Public Utilities Commission of Ohio seconded. The motion carried. The meeting was adjourned at 3:45 p.m.
January 17, 2012 URSB Statutory Meeting Summary:

UTILITY RADIOLOGICAL SAFETY BOARD
MEETING MINUTES
JANUARY 17, 2012

Mr. Mel House, Ohio Emergency Management Agency, called to order the January 17, 2012 meeting of the Utility Radiological Safety Board at 1:30 p.m.

The first order of business from the agenda was the roll call taken by Tess Ocean.

I. ROLL CALL

EMERGENCY MANAGEMENT AGENCY
MR. MEL HOUSE

DEPARTMENT OF HEALTH
MR. MICHAEL SNEE

DEPARTMENT OF AGRICULTURE
MR. CHUCK KIRCHNER

PUBLIC UTILITIES COMMISSION
MR. DAN FISHER

ENVIRONMENTAL PROTECTION AGENCY
MR. KEVIN CLOUSE

DEPARTMENT OF COMMERCE
MR. DEAN JAGGER

A quorum was declared.

II. READING OF THE OCTOBER 11, 2011 MINUTES

The board dispensed with the reading of the October 11, 2011 minutes. Mr. House asked for additions, corrections or deletions to the minutes. Mr. House asked for a motion to approve the minutes. Mr. Chuck Kirchner of the Department of Agriculture moved to adopt the minutes and Mr. Michael Snee of the Department of Health seconded. The motion carried.

III. OLD BUSINESS

A. Updated Status of the URSB Initiatives

Mr. Michael Bear of the Ohio Emergency Management Agency and Mr. Steve Helmer of the Ohio Department of Health reviewed the URSB initiatives. Topics briefed included Perry Nuclear Power Plant Cross-Cutting Human Performance Issues, After-Action Activities, IZRRAG Activities, Reactor Oversight Program, Technology, the State-Dose Assessment Program, Potassium Iodide, REP Guidance and Rulemaking, Procedural Review and the Joint Inspection Observation Program.

Mr. House asked Mr. Helmer what the timeframe is for making a recommendation for dose assessment software. Mr. Helmer deferred to Ms. Pam Hintz of the Ohio Department of Health and said that the agencies are prepared to test RASCAL for the spring dry-run and to see how it works with the parameters. To answer the question, Mr. Helmer said that they don’t know yet and are still working in the issue. Mr. House said we might want to exercise that pre-dry run. Mr. Bear stated that EMA has old exercise data, which could be input into the program to test it out. Mr. House commented that given the importance of exercises, it is difficult to test a new program during an exercise.
B. Midwestern Committee Report

Mr. Michael Snee reported that the Midwestern Radioactive Materials Transportation Committee met in Carlsbad, New Mexico in December. This meeting included a tour of the new trans-uranic facility. One of the main points of the meeting was trans-uranic waste shipments are going down drastically. In the next couple years, the WIPP shipments will have decreased quite a bit. This is worrying people in Carlsbad, as this brings money into the community. They are also looking at land in the desert to try and put an interim storage facility there. They are looking at turning the WIPP facility into the next Yucca Mountain. This is about thirty years down the road, but seems to have community support in this. The next meeting is in May, as part of the National Transportation Safety Forum, in Knoxville, TN.

IV. NEW BUSINESS

A. URSB Working Group Quarterly Reports

Each of the participating URSB Working Group agencies provided a report of their respective state agency activities. Each agency’s report is available upon request from the URSB Secretary.

B. Consideration of Status of the URSB Citizen’s Advisory Council

Mr. Bear stated that in late November, he received an inquiry from someone who used to be on the Citizen’s Advisory Council, which is a citizen’s version of the URSB. Due to lack of interest, the council ceased to meet. Mr. Bear discussed the inquiry with Director Nancy Dragani, Chair of the Utility Radiological Safety Board, and it was decided to bring the discussion before the Board. Ohio EPA facilitated the Citizen’s Advisory Council (CAC). Mr. Clayton provided an Executive Summary on the history of the CAC, which is available upon request from the URSB Secretary.

The consensus of the Board was that one person is not “general public interest” and cannot justify reinvigorating the CAC.

Ms. Tammy Little, Legal Representative for the Utility Radiological Safety Board, stated that for about two years, there was a significant effort to try and generate interest in the CAC, to no avail. Ms. Little indicated that because of the very specific requirements in the Ohio Administrative Code rule, that the Board consider encouraging any interested party to participate in quarterly URSB meetings rather than trying to re-establish the CAC. Mr. House stated that by the end of the year, we will have held meetings in all three nuclear power plant regions and that will help the Board further gauge public interest. Ms. Little stated that all Administrative Rules have a regular five-year rule review cycle and these rules require that review in 2014.

C. Nuclear Regulatory Commission

Mr. Allan Barker of the Nuclear Regulatory Commission reported on the following topics: oversight of the FENOC plants and the Davis-Besse public meeting that was held on January 5, 2012.

Mr. Barker’s report to the Board is available upon request from the URSB Secretary.
D. Federal Emergency Management Agency

The Federal Emergency Management Agency representative was unable to attend the meeting, due to participation at the Site-Specific REP Program Manual Workshops.

E. Utility Reports

Mr. Fred Cayia, Director of Fleet Performance Improvement for FENOC, and Mr. Ricky Collings, Supervisor, Fleet Emergency Preparedness, attended the meeting. Mr. Collings provided the utility report updates on:

1. Beaver Valley Power Station
2. Davis-Besse Nuclear Power Station
3. Perry Nuclear Power Plant
4. FENOC

Specific topics of discussion included the Davis-Besse shield building cracking, the November 16, 2011 alert at Davis-Besse, the Perry Nuclear Power Plant start-up transformer replacement and the status of cross-cutting areas of human performance at Perry Nuclear Power Plant and the discussion topics for FENOC included the replacement of direct notification lines and status of Emergency Operations Facilities.

Questions addressed included the dedicated phone lines, the transformer replacement and spring clips not meeting standards discovered in the Part 21 process.

Mr. Cayia gave a presentation on the Davis-Besse Nuclear Power Station head replacement.

V. MISCELLANEOUS

A. Location of next URSB Meeting

The next URSB meeting will be held in Lake County, as their new EOC will be completed by April. The facility can handle up to 70 people, so there will be plenty of room if any members of the public attend.

B. Questions from the Public

There were no questions from the public.

VI. ADJOURNMENT

Mr. Mel House, Ohio Emergency Management Agency, asked if there was a motion to adjourn the meeting. Mr. Dan Fisher, Public Utilities Commission of Ohio, motioned to adjourn the meeting and Mr. Kevin Clouse, Environmental Protection Agency of Ohio, seconded. The motion carried. The meeting was adjourned.
April 9, 2012 URSB Statutory Meeting Summary:

UTILITY RADIOLOGICAL SAFETY BOARD
MEETING MINUTES
APRIL 9, 2012

Ms. Nancy Dragani, Ohio Emergency Management Agency, called to order the April 9, 2012 meeting of the Utility Radiological Safety Board at 10:31 a.m. at the Perry Nuclear Power Plant Emergency Operations Facility.

The first order of business from the agenda was the roll call taken by Tess Ocean.

VII. ROLL CALL

EMERGENCY MANAGEMENT AGENCY  MS. NANCY DRAGANI
DEPARTMENT OF HEALTH  MR. MICHAEL SNEE
DEPARTMENT OF AGRICULTURE  MR. CHUCK KIRCHNER
PUBLIC UTILITIES COMMISSION  MR. DAN FISHER
ENVIRONMENTAL PROTECTION AGENCY  MR. KEVIN CLOUSE
DEPARTMENT OF COMMERCE  MR. DEAN JAGGER

A quorum was declared.

VIII. READING OF THE JANUARY 17, 2012 MINUTES

The board dispensed with the reading of the January 17, 2012 minutes. Ms. Nancy Dragani, Ohio Emergency Management Agency asked for additions, corrections or deletions to the minutes. Ms. Dragani asked for a motion to approve the minutes. Mr. Michael Snee of the Department of Health moved to adopt the minutes and Mr. Chuck Kirchner of the Department of Agriculture seconded. The motion carried.

IX. OLD BUSINESS

A. Updated Status of the URSB Initiatives

Mr. Michael Bear of the Ohio Emergency Management Agency and Mr. Stephen Helmer of the Ohio Department of Health reviewed the URSB Initiatives. Topics briefed included the Beaver Valley Nuclear Power Station Evaluated Exercise, the Perry Nuclear Power Plant Cross-Cutting Human Performance Issues, After-Action Plan Activities, IZRRAG Activities, Reactor Oversight Program for Davis-Besse Nuclear Power Station, the Beaver Valley Nuclear Power Station and the Perry Nuclear Power Plant, Technology, State Dose Assessment, KI, REP Guidance and NRC Rulemaking, Procedural Review and the Joint Inspection Observation Program. Specific topics of discussion included the PNPP Ingestion exercise and IZRRAG activities, Dose Assessment software and KI.

B. Midwestern Committee Report

Mr. Snee stated that the next meeting of the Midwestern Committee will be held in Knoxville, TN, next month. He will provide an update at the July URSB Statutory meeting.
X. NEW BUSINESS

A. New Ohio EPA Designee

Mr. Kevin Clouse is the new EPA designee. He supervises the Emergency Response Program and the Special Investigations program. He also oversees the Radiation Assessment Team at OEPA.

B. URSB WG Quarterly Reports

Each of the participating URSB WG agencies provided a report of their respective state agency activities. Each agency’s report is available upon request from the URSB Secretary.

C. Nuclear Regulatory Commission

Mr. Allan Barker of the Nuclear Regulatory Commission reported on the following topics: the Oversight of First Energy Nuclear Operating Company Plants, the April 5, 2012, PNPP Government to Government and Public Meetings, the date of the next DBNPS Public Meeting and Confirmatory Orders based on Fukushima Accident Analysis.

Mr. Barker’s report is available upon request from the URSB Secretary.

The three Assessment Letters for each plant are available upon request from the URSB Secretary.

Mr. Barker stated that PNPP has had human performance issues in the last nine assessment periods. It was asked what the next steps are for the NRC if no improvement is seen. Mr. Barker stated that in the last assessment letter, it was discussed about PNPP being outside the action matrix and having special inspections performed. Once a plant is outside the action matrix and additional special inspection efforts are required, an agency initiative is needed. The human performance inspections are a leading indicator to trend issues and bring focus to the issues. The next step for the NRC, if they believe that the plant is operating unsafely, is to order the plant to shut down. The special inspection 95002, based on its outcome and structure, will identify at a detailed level exactly where the issues are. The 95002 inspections are not frequently performed in the country. If there is one White Finding in a degraded cornerstone, a 95001 special inspection is performed and two white findings will elicit a 95002 inspection. A 95003 inspection is a large team inspection and will look at safety culture across the board.

D. Federal Emergency Management Agency

The Federal Emergency Management Agency representative was unable to attend the meeting.

E. Utility Reports

Mr. Ricky Collings, Supervisor of Fleet Emergency Preparedness, Mr. Fred Cayia, Director of Fleet Performance Improvement, and Mr. Harlan Hanson, the Director of Performance Improvement at PNPP, attended the meeting.
Mr. Collings provided the utility report updates on:

1. Beaver Valley Power Station
2. Davis-Besse Nuclear Power Station
3. Perry Nuclear Power Plant
4. FENOC

Specific topics of discussion included: the Beaver Valley Power Station status of new Emergency Action Levels and progress on the reorganization of spent fuel, the Davis-Besse Nuclear Power Station shield building cracking-root cause analysis, the Perry Nuclear Power Plant status of cross-cutting areas of human performance by the plant lead, including the root cause of human performance issues, corrective actions implemented to date and the reasons for delaying the NRC Confirmatory Inspection and Lakeland College. Topics for FENOC included the Status of the MIDAS Program, the data for dose assessment with RASCAL, the status of the new Emergency Operations Facilities and evacuation time estimates.

It was asked if there was a long-term plan for spent fuel storage. DBNPS and PNPP are using dry cask storage as a short-term action. FENOC fully expects the government to take the fuel, as they had promised. Mr. Barker stated that the NRC is no longer viewing Yucca Mountain as a viable option.

Mr. Collings’ report is available upon request from the URSB Secretary.

Mr. Hanson provided information on the PNPP Cross-Cutting areas of Human Performance.

Mr. Cayia provided a PowerPoint presentation on the final report of the Davis-Besse Shield Building cracking issues. The PowerPoint presentation is available on request from the URSB Secretary.

XI. MISCELLANEOUS

A. Location of the next URSB Meeting

The next URSB Statutory meeting will be held at Davis-Besse Nuclear Power Station in Ottawa County. Mr. McKee will see if a tour of the plant can be arranged.

B. Questions for the Public

There were no questions from the public.

XII. ADJOURNMENT

Ms. Dragani, Ohio Emergency Management Agency, asked if there was a motion to adjourn the meeting. Mr. Clouse, Ohio Environmental Protection Agency, motioned to adjourn the meeting and Mr. Fisher, Public Utilities Commission of Ohio, seconded. The motion carried. The meeting was adjourned at 2:23 p.m.
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 FY12 the URSB JIOP participants observed eleven 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 FY2012 (July 1, 2011 to June 30, 2012)

<table>
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<tr>
<th>JIOP Number</th>
<th>Date(s)</th>
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<td>2011-DBNPS-02</td>
<td>August 8, 2011</td>
<td>Radiological Hazard Assessment and Exposure Controls</td>
<td>ODH</td>
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<td>2011-PNPP-04</td>
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<td>ODH</td>
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<td>September 12-16, 2011</td>
<td>Radiation Monitoring Instrumentation, RETS/ODCM Radiological Effluent Program</td>
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<td>Occupational ALARA Planning and Controls, Radiological Environmental Monitoring Program</td>
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<td>Radiological Hazard and Exposure Controls, Occupational ALARA Planning and Controls</td>
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<td>April 23 - 26, 2012</td>
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FINANCIAL REPORT
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<th>SFY10</th>
<th>SFY11</th>
<th>SFY12</th>
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<tr>
<td>Public Utilities Commission♦</td>
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</table>

♦ 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 in December 2011, 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 17, 18, 2011 and the Tabletop Drill held on October 20 and 21, 2011. ODA also participated in a two day outreach session with FEMA and other Federal players on June 28th and 29th, 2012 at Ohio EMA. Sessions included federal presentations, Field Sample Training, Dose Assessment Training, and a Table Top Ingestion Exercise.
OHIO DEPARTMENT OF COMMERCE
DIVISION OF INDUSTRIAL COMPLIANCE

The overall mission of the Ohio Department of Commerce (ODC), Division of Industrial Compliance 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 SFY12, 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)

ANNUAL REPORT – FISCAL YEAR 2012

OHIO DEPARTMENT OF HEALTH
DIVISION OF PREVENTION
BUREAU OF RADIATION PROTECTION

Prepared By:

PAMELA HINTZ, SENIOR HEALTH PHYSICIST
TECHNICAL SUPPORT SECTION

Reviewed By:

DAVID LIPP, SUPERVISOR
TECHNICAL SUPPORT SECTION

Approved By:

STEPHEN HELMER, PROGRAM ADMINISTRATOR
TECHNICAL SUPPORT SECTION

August 6, 2012
OHIO DEPARTMENT OF HEALTH

The Ohio Department of Health Bureau of Radiation Protection (ODH-BRP) provides support to the URSB through its statutory functions in matters of radiation protection. ODH-BRP is designated the Ohio radiation control agency in accordance with Ohio Revised Code 3748.02. ODH-BRP 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-BRP staff regularly participates in nuclear power plant exercises. ODH-BRP participated in the June 2012 Beaver Valley Power Station (BVPS) evaluated exercises. ODH-BRP 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-BRP staff attended several training sessions, including: an in-house nuclear power response overview, plant-specific systems training, tabletop exercise, and Field Monitoring Team training. This year, ODH-BRP staff members were moved to different positions in an effort to broaden our base of available resources.

Ingestion Zone Recovery and Reentry Advisory Group (IZRRAG) training was conducted in October 2011. An environmental sample screening practice drill was conducted in conjunction with Ohio EPA at the NASA Plum Brook facility in May 2012. Federal Radiological Monitoring and Assessment Center (FRMAC) Outreach Training was held June 28 and 29 in preparation for the upcoming Ingestion Phase Exercise in 2012.

MS-1 medical drills are routinely observed by ODH-BRP staff at designated hospitals inside the 10-mile Emergency Planning Zone. In this fiscal year, ODH-BRP staff observed one MS-1 exercise at Salem Community Hospital in September 2011 (off-year exercise). The hospital was 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 addressing URSB After-Action items. These meetings provide an opportunity to collaborate with URSB member agencies, as well as utility and local government representatives for planning purposes, resolution of common issues, and identification and tracking of corrective actions documented during exercise activities.

ODH-BRP regularly joins with URSB member agencies and First Energy Nuclear Operating Company (FENOC) in development and training activities. This fiscal year included the
presentation of Field Monitoring Team training, and a joint review of the Ohio Plan for Response to Radiation Emergencies at Commercial Nuclear Power Plants (REP Plan) with OEMA; Media Training presented by First Energy; and attendance at the quarterly BVPS Tri-State meetings.

**Joint Inspection Observation Program (JIOP)**

ODH-BRP staff participates with the United States Nuclear Regulatory Commission (NRC) in the Joint Inspection Observation Program (JIOP) inspections. Eleven JIOPs covering nineteen topic areas were completed by ODH staff in the last 12 months. The details of the topics can be found in the URSB Joint Inspection Observation Program Section of this annual report. 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-BRP 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 Shield Building Cracking**

ODH-BRP is following the Shield Building Cracking issue as the process through NRC continues.

**Dose Assessment Activities**

ODH-BRP sent two staff members to the NRC’s Dose Assessment RASCAL 4.2 Training in Lisle, IL in November 2011. Also, the Radiological Accident Assessment Concepts Course (RAAC) was brought to Ohio in February/March 2012 in which six staff members participated.

**Radiological Environmental Monitoring Activities**

ODH staff oversees offsite radiological environmental monitoring activities at the 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 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. There was minimal equipment turnover as only one pump and one elapsed timer was replaced. During previous audits, it was discovered that the air sampler
located in the Davis Besse Marsh was slowly sinking into the ground, causing the weather housing to become out of level. ODH-BRP staff members leveled the sampler by placing paver stones under each of the support legs and re-anchoring the weather housing to the ground. Routine maintenance was performed on the first rotary pump placed into service in East Liverpool during 2011 and the pump is continuing to run successfully. The inventory needs of each environmental contractor continued to be met throughout the year as the distribution of supplies for the collection of samples continued without difficulty. Environmental contractor audits for fiscal year 2012 were completed.

The draft ODH Annual Environmental Monitoring Report for 2011 is currently under review.

**Other Related Items**

A member of the ODH-BRP staff was able to participate in the FEMA Region V Scheduling Conference in May 2012. The conference featured speakers from FEMA Region V, FEMA Headquarters, NRC, and various agreement states.

A member of the ODH-BRP staff was able to participate in the National Radiological Emergency Preparedness (NREP) Conference held in St Paul, MN in April 2012. The conference featured speakers from FEMA, NRC, CRCPD, FDA, DOD/DOE and various states.

A member of the ODH-BRP staff was able to participate in the FEMA Region V REP Manual Rollout workshop in Chicago, IL in January 2012. FEMA Region V later conducted 3-day local workshops for all three plants affecting Ohio. ODH-BRP representatives attended these workshops as well.
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 SFY2012 there was one federally evaluated exercise:

**Beaver Valley Power Station Partial Participation**

The 2012 Beaver Valley Power Station partial participation exercise was conducted on the week of June 19, 2012. There were no findings for either the State or for Columbiana County during this exercise. Columbiana County successfully re-demonstrated an Area Requiring Corrective Action (ARCA) from their previous exercise in 2010. There are no issues carried forward for either agency.
Drills

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

- Perry Nuclear Power Plant:
  - September 28, 2011
  - November 15, 2011
  - March 14, 2012
  - April 4, 2012
- Beaver Valley Power Station:
  - November 17, 2011
  - March 15, 2012
  - May 22, 2012 – Dry Run
  - June 5, 2012 – Dry Run 2
- Davis-Besse Nuclear Power Station
  - March 22, 2012
- Field Monitoring Team Drills
  - May 3, 2012
  - May 22, 2012

Ingestion Zone Reentry and Recovery Advisory Group (IZRRAG) Activities:

- IZRRAG training was conducted on October 17-20, 2011.
- IZRRAG drill including Field Team Center/Sample Screening Point activities and Sampling Practices was conducted on October 17th and 19th, 2011.
- IZRRAG Tabletop drill was conducted on October 20th and 21st, 2011.
- IZRRAG two day outreach session with FEMA and other Federal players on June 28th and 29th, 2012 at Ohio EMA. Sessions included federal presentations, Field Sample Training, Dose Assessment training.
- FEMA Moderated Table Top Ingestion Exercise June 28th, 2012.

Nuclear Power Plant Incidents

There was one classifiable event in SFY12 for FENOC plants. Davis Besse Nuclear Power Station declared an Alert on November 16th, 2011, due to a fire in an electrical bus supplying Safety Related Equipment. The fire was caused by water spraying onto a breaker in the Auxiliary Building.

Regulatory Updates

The new FEMA Radiological Emergency Planning Manual and NRC Emergency Response rules became effective on December 23, 2011. The manual is intended to become the primary guidance document for offsite organizations to develop their REP plans. A new version of the manual incorporating corrections and changes was issued in April of 2012. FEMA Region V provided draft answers to some of the questions that have been raised during recent outreach sessions held in February and March of 2012. These answers are being evaluated to determine if Ohio’s concerns have been addressed.
FEMA Region V Scheduling Conference

Michael Bear and Peter Hill attended the Conference held in Chicago Illinois on May 29-31, 2012. Agenda topics of discussion included: FEMA and NRC updates, Alert and Notification Systems, National and Regional Training Opportunities, and unresolved questions stemming from the new FEMA Radiological Emergency Planning Manual. The dates of upcoming exercises were confirmed or rescheduled in light of the new requirements captured in the new planning manual.

Emergency Planning

The 2012 draft of the State REP Plan has been submitted to FEMA for review and approval. This year marks a major change in the REP plan format as it has been converted from a stand-alone document to an annex of the State Emergency Operation Plan. This will bring us closer to integrating REP more closely with the all hazard planning goal embodied in FEMA’s HSEEP program.

In addition to the state plan, the plans for counties have also been submitted for FEMA review. In addition to reviewing plans FEMA is now requiring Standard Operating Procedures/Standard Operating Guidelines to be submitted for review as well. This is an old requirement that was not stringently enforced in the past that has gained new life with the release of the new REP Planning Manual. The State and counties are in the process of assembling this information.
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 track 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.

Ohio EPA participates in Power plant evaluated exercises with other state agencies. In SFY 2012 there was only one evaluated exercise that the State participated in with Beaver Valley. This was a partial participation exercise and only the State and Columbiana County EOC were activated for this. The Ingestion plan was not exercised and the Ohio EPA field teams did not deploy.

Ohio EPA provides training for the Radiological Assessment Team (RAT) several times a year. This group provides environmental sampling for the Ingestion Zone Reentry and Recovery Advisory Group (IZRRAG).

RAT training was conducted at NASA Plum Brook Station August 30, 2011.

OEPA participated in IZRRAG and RAT training the week of October 17, 2011 at Ohio EMA.

Sampling and Screening Training was held at NASA Plum Brook with ODH and OEMA May 9-10, 2012 to test procedure revisions.


OEPA participated in the FRMAC outreach at Ohio EMA June 29-30, 2012.
The only industrial event that involved Ohio EPA and a Power plant was on October 17, 2011, the Perry Nuclear Power Plant in Perry, Ohio, had a release of approximately 1,500 gallons of a fuel oil/gasoline mixture. The release occurred at the power plant in a fire department training area outside the restricted area of the plant. First Energy first reported the release on October 21, 2011 to the Ohio EPA hotline after the area where the release occurred was determined to be a wetlands by the company. The site was inspected by the Emergency Response Section on October 24, 2011, and at that time the amount of petroleum released was reduced to approximately 1,200 gallons by First Energy.

It was determined during the inspection that the petroleum was contained to property owned by First Energy, however, the fuel oil/gasoline mixture had entered both surface and ground waters on the property. Contractors were already at the site removing contaminated water and excavating trenches to contain the release. The company was issued a Notice of Violation on October 27, 2011, by the Emergency Response Section for a violation of Chapter 6111 of the Ohio Revised Code.
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. The following is a summary from the twenty-first refueling outage at Beaver Valley Unit 1:

   - Dose: Dose for the outage is projected to 46,922 mrem which is less than the stretch goal of 48,000 mrem.
   - Personal Contamination Event (PCE): The stretch goal was 13 PCE’s or less. This goal was exceeded by five for a total of 18 PCE’s.
   - Safety: There was one OSHA Recordable and four First Aids. This performance was not in line with expectations. The post outage critique is being used to identify issues and improve performance going forward.
   - Schedule: Overall Duration was 32 days, 5 hours, 28 minutes. The refueling grappler issues resulted in a longer outage than planned.
   - Work Orders: The initial scope of work that was established at the scope control milestone freeze date was 1805 orders for business plan duration of 25 days. During 1R21 there were a total of 342 orders (approximately 18.9%) added, 119 orders (approximately 6.5%) dropped and 129 orders (approximately 7.1%) changed work bringing the total number of orders completed during the outage to 1959.
   - Engineering Change Packages: There were a total of 72 ECP’s performed during 1R21 which included 21 emergent ECP packages.

A challenge to the outage was when the refueling grappler tool became wedged onto a fuel assembly at core location F07. The refueling mast and fuel assembly were not aligned properly. Past industry practices have been to slightly raise the mast and then re-index it over the fuel
assembly. This practice resulted in the grappler becoming wedged on to the top of the fuel assembly.

A root cause was performed that identified use of an accepted industry practice for re-indexing the grappler when misalignment occurs as the cause. This, combined with the lack of structured verification practices within the refueling procedures and the vendor’s specification, allowed the refueling team to develop a mindset that there was not a potential for the Manipulator Crane gripper to become lodged in a fuel assembly top nozzle. The cause analysis also stated that the process (prior to the 1R21 event), and industry common practice for engaging and latching a fuel assembly is to ensure that the crane mast is “on index” by viewing the marks provided on and adjacent to the crane bridge was a contributing cause. The process was if a slack cable indication is received and the Z-Z axis tape is reading high, the practice was to operate the hoist in an upward direction, and adjust the crane in the proper position to engage the respective fuel assembly. A number of corrective actions were taken including:

- The Identification and implementation of a mechanism to preclude unintended mast rotation for normal fuel orientations for both the Unit 1 and Unit 2 Manipulator Cranes.
- Obtain acceptance criteria and revise and perform preventive maintenance on the Manipulator Crane Mast rollers, guides, keys and keyways (both units) to assure equipment is within acceptance criteria.
- Revision of refueling procedures to provide more specific instruction for proper gripper to fuel assembly alignment. Some of the information which shall be included is:
  - Refueling personnel roles and responsibilities.
  - (Senior Reactor Operator (SRO) must verify water clarity is adequate to view top nozzle S-holes prior to core offload and Core Plate pins prior to core reload.
  - When lowering the gripper assembly to latch fuel, downward motion shall be halted just prior to contact until a focused effort is made to ensure proper gripper to top nozzle alignment.
  - A requirement to document precursor events such as the need to realign the gripper over the fuel assembly.
  - If needed underwater video equipment shall be used to obtain visual verification as described in the Westinghouse Specification.

2. The 2012 Evaluated Exercise was completed on June 22, 2012 with exits by FEMA in both Region 3 and 5. The report has not yet been issued yet however the verbal results are:

   a. State of Ohio - No Issues
   b. Columbiana County - No Issues
   c. Commonwealth of Pennsylvania - No Issues
   d. Beaver County - 2 ARCA’s – both re-demonstrated & closed. 1 Planning Issue – closed
   e. Four PA support counties - No Issues
   f. State of West Virginia - 1 ARCA – re-demonstrated & closed. 1 previous ARCA – closed. 1 previous planning issue – closed
   g. Hancock County - 1 ARCA – re-demonstrated & closed. 1 Planning Issue with a goal to have it closed before the Draft Reports is issued
The NRC debrief for Beaver Valley stated that there were no findings identified. One issue noted was that current station procedures require the Emergency Recovery Manager in the EOF to authorize dose assessment to run “what if” dose projections. One occasion was noted when that authorization was not given. No adverse result was noted for this lack of procedure compliance. BV Emergency Response is revising the procedure to eliminate this unnecessary restriction. The NRC also noted that the new EOF was a major improvement and is one of the best in Region 1.

3. Siren Replacement Update

The siren project at Beaver Valley was completed in late September, 2011. 30 sirens (including new poles, control boxes and radios) were replaced. 28 existing upgraded sirens had battery back up added to them. This results in upgraded siren and battery backup for all 120 Beaver Valley sirens. A Siren Design Report change was made to perform a weekly siren test (fleet standard) from a quarterly test.

4. Status of new Emergency Action Levels

The license amendment was submitted on December 23, 2011. The NRC review period is generally one year. The site schedule is to obtain approval by December of 2012. Training will begin in 2013 with completion in June 2013. Shortly after that the site will cutover to the new EALs.
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) New Areva Reactor Head

The new Davis-Besse Reactor Vessel Integrated Head Assembly was installed in the fall of 2011. The replacement required a large opening to be cut into the Shield Building and the Containment. Work was completed on schedule however some cracking of the concrete in the Shield Building was noted (see information below). The storage facility for the old Reactor Vessel Head and eventually the Steam Generators is complete and accepted the old Reactor Vessel Head for long term storage.

2) Shield Building Cracking – Root Cause Analysis

On October 10, 2011, a concrete crack was observed at the architectural flute shoulder region of a temporary access opening in the wall of the shield building at the Davis-Besse Nuclear Power Station. The temporary access opening was created during the mid-cycle outage to enable replacement of the reactor vessel head.

A team of experts was assembled to assess and analyze the condition of the shield building. Detailed analyses were completed and reviewed by the Nuclear Regulatory Commission prior to restart of the unit. These analyses determined that the shield building was capable of performing its design function. A root cause investigation was conducted using a team of subject matter experts. The root cause investigation was completed in February 2012 and submitted to the Nuclear Regulatory Commission as required by the confirmatory action letter.
This root cause investigation thoroughly evaluated potential failure modes and determined the most likely scenario based on extensive analysis. Material properties of the concrete were determined at laboratories using core bores removed from the shield building.

The root cause investigation determined that design features of the shield building in conjunction with the blizzard of 1978 resulted in the stresses required to cause the observed cracking. Corrective actions include application of a sealant to the exterior surface of the shield building and establishment of a long term monitoring program. The results of the root cause investigation were reviewed and accepted by the NRC in June 2012.

3) November 16, 2011 Alert

The initial conditions were that the plant was in Mode 5 and the outage organization was staffed on an around the clock basis. The Shift Engineer responded to a report that water was coming down on a Motor Control Center (MCC) in the auxiliary building. The Shift Engineer reported at about 0214 that there had been an explosion with a flash of flame at E11C. This occurred in a circuit breaker which supplies power to the motor that operates the Control Room Emergency Ventilation System Train 1 Inlet Damper. The station implemented the fire response procedure and activated the station fire brigade.

At 0222 the Shift Manager evaluated plant and declared an Alert under emergency action level (EAL) HA4, FIRE or EXPLOSION affecting the operability of plant safety systems required to establish or maintain safe shutdown. The declaration was made based on the affecting the operability of plant safety systems in the auxiliary building. Operations de-energized Motor Control Centers E11A through E11D and the fire was reported extinguished at 0233 after isolating MCC E11C.

The Control Room began offsite notifications at 0234. Problems were experienced with the Lucas County and State of Ohio legs of the 4-way ring-down phone not ringing. Operations personnel appropriately contacted Lucas County and the State of Ohio on a commercial phone and requested that they pick up the 4-way telephone. Once Lucas County and the State of Ohio joined Ottawa County on the 4-way circuit the dedicated phone worked as expected. The offsite notifications to state and local agencies were completed in 19 minutes. It should be noted that the 4-way phone is tested every morning at approximately 0500. Recent tests prior to the Alert had all been successful.

After receiving the notification of an Alert due to a fire at the station Ottawa County dispatched Carroll Township Fire and EMS. No offsite support was requested by the station because the station fire brigade was successful in extinguishing the fire after the switchgear was de-energized.

The Carroll Township Fire Chief provided feedback that he was concerned that no one was immediately available to respond to his questions and that site security turn him away. Follow-up will be conducted with Carroll Township Fire personnel.

Emergency Response Organization personnel responded quickly to their assigned emergency response facilities. Several members of the ERO were working backshift supporting the outage and immediately responded to their assigned emergency response facility. The Emergency Assistant Plant Manager who was on-shift immediately responded to the Control Room, however he did not
relieve the Shift Manager of Emergency Director responsibilities until 0300, 38 minutes after the event was declared. This turnover could have been more timely. The expectation is that turnover occurs as soon as possible unless turnover to the Emergency Director in the TSC/EOF is imminent. The Shift Manager should be relieved as soon as possible so that he may return to his plant oversight role.

Emergency Director turnover from the control room to the TSC/EOF did not occur until 47 minutes after the TSC and EOF were activated. This turnover occurred 80 minutes after the Alert was declared. The Operations Support Center (OSC) assembled and documented dispatching 7 emergency repair teams. With the declaration of the emergency, 240 nonessential personnel from the Protected Area were assembled in the Training Center and directed to standby.

The Joint Information Center (JIC) was activated, however no media reported to the facility. Local news media responded to the edge of the plant property. Information about the event was obtained by the media by contacting corporate communications representative via telephone.

The event was terminated at 0443, facility debriefs were conducted and the ERO was released. The ERO response to the event was evaluated against established drill objects and credit was given for those objectives that were successful demonstrations.

The weaknesses and opportunities for improvement are documented in Condition Reports (CRs) and entered into the corrective action program. These CRs, their associated corrective actions and SAP notifications will track these items to completion.

4) Status of License Renewal

The original operating license for Davis-Besse will expire on April 22, 2017. FENOC has submitted an application for license renewal to extend the facility operating license to April 22, 2037. As part of this application, FENOC has developed programs to monitor the aging of structures and passive components and will conduct inspections, many of which involve additional internal inspections and additional non-destructive examinations of these structures. The renewed license approval is dependent on NRC issuance of a final Safety Evaluation Report (SER) and a final site-specific Supplemental Environmental Impact Statement (SEIS). Several public advocacy groups oppose the issuance of the renewed license and have filed contentions before the NRC’s Atomic Safety and Licensing Board (ASLB).

Schedule: The current schedule for review of the Davis-Besse application by the NRC can be found on the NRC website at www.nrc.gov/license renewal/plant status/Davis-Besse. A draft SER is scheduled to be issued by the NRC near the end of July 2012. Pending the resolution of five open items, the final SER is scheduled for issuance in October 2012. The schedule for issuance of the draft and final SEIS is under review by the NRC. There are five open items related to aging management programs for resolution before the final SER can be issued. The success path to resolution has been identified by the FENOC project team. Pending near term submittal of docketed information and acceptable review by the NRC reviewers, the final SER schedule should not be affected.
Disposition of pending hearing before the NRC Atomic Safety and Licensing Board: Four public advocacy groups have been granted a hearing with respect to the Davis-Besse License Renewal application. A portion of one contention (issue) related to alleged weakness in FENOC’s SAMA analysis has been admitted for review by the Atomic Safety and Licensing Board (ASLB). The public advocacy groups have also requested that the ASLB admit another contention related to the Davis Besse Shield Building. They claim that the laminar cracking identified in the Shield Building should preclude the continued operation of Davis-Besse. The ASLB has yet to rule on this request to expand the hearing.

The potential for industry events that originate new regulatory requirements: Significant industry events, such as the Crystal River, Seabrook, or Davis-Besse structure-related issues, are often the origin of regulatory changes. Utilities must remain cognizant of current industry events and adjust aging management programs accordingly. For those applications under review, approval schedules may be affected by additional NRC requests or other regulatory actions.
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) NRC Special Inspection – Source Range Monitor Removal

A Source Range Monitor Detector cable was being replaced during a refueling outage in the spring of 2011. The replacement resulted in unanticipated personal monitoring device alarms for the individuals performing the work under the reactor vessel. A root cause analysis was performed that identified the cause as a 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.
a) Corrective Actions

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.

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).

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, reinset 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 (per SOER 2001-01).
2) NRC evaluation of station performance

A white performance indicator and a white finding in the Occupational Radiation Safety Cornerstone resulted in Perry’s performance moving to the Degraded Cornerstone column of the NRC’s Reactor Oversight Program (ROP) Action Matrix. The issues occurred during Perry’s refueling outage earlier this year. Under the ROP, the NRC is expected to conduct a supplemental inspection to review the root causes and corrective actions for the individual events and the events collectively, using NRC Inspection Procedure 95002, “Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area.” Perry has preliminarily targeted the end of March 2012 for conduct of the inspection, pending the completion of readiness actions and closure reviews, and concurrence with the NRC on the inspection schedule.

3) Start-Up Transformer Replacement

On September 26, 2011, at 0158 hours, the unit 1 startup transformer was taken out of service to perform scheduled maintenance. The unit 2 startup transformer and the manual unit 1 backfeed lineup were considered to be the two qualified offsite circuits required by the plant’s Technical Specifications. Following discussion with the NRC, further review of this configuration determined that the backfeed lineup could not be credited as a qualified offsite circuit. As a result of the NRC input, this review also revealed that required Technical Specification actions were not completed when the startup transformer was declared inoperable on September 26, 2011. Transformer maintenance was secured and the unit 1 startup transformer was returned to service on September 28, 2011, at 2222 hours.

On September 29, 2011, at 0529 hours, the unit 1 startup transformer tripped due to an internal fault. The transformer fault was caused by an internal flash-over between the B phase bushing corona ring and the grounded tank wall. The flash-over resulted from a damaged corona ring (cracks) on the B phase transformer high voltage bushing and a low transformer oil dielectric. Analysis of the corona ring determined that the cracks existed prior to the transformer fault. On October 2, 2011, at 0100 hours, a planned shutdown was commenced to repair the unit 1 startup transformer and at 1614 hours, plant shutdown was completed by manual actuation of the Reactor Protection System. Corrective actions for these events include approval of a License Amendment to clarify the use of a delayed access circuit as a qualified offsite circuit and installation of a replacement startup transformer. Additional corrective actions, based on the conclusions of the ongoing root cause evaluation, will be described in a supplemental licensee event report.
FirstEnergy Fleet Emergency Preparedness

West Akron Campus

1) Fleet standard dose assessment program (MIDAS)
   - Beaver Valley – The new MIDAS program is in full use at the new EOF. Training of on-shift dose assessors is in progress now that the outage has been completed. When the training is complete the site will be fully on the new MIDAS program.
   - Perry – Training has been completed. The program is available and the site will cut over to MIDAS when the move into the new EOF is completed in August, 2012.
   - Davis-Besse – Work on revising the Emergency Plan to utilize NUREG 1228 source term methodology continues with it less likely to require a license amendment. Final actions for Perry will be completed in August and then the focus will be on Davis-Besse to support MIDAS for their new EOF in October 2012.

2) New Emergency Operations Facilities
   - Beaver Valley is complete. It was used for the recent Evaluated Exercise with excellent results.
   - Perry is complete with some minor punch list work continuing. An open house was held on July 17, 2012 with attendance by the three risk counties and the State of Ohio. The transition will be completed by August 2012.
3) e-Data project

- Beaver Valley – Plant and simulator data is available. The data was used during the Beaver Valley Evaluated Exercise in June 2012 with positive feedback.

- Perry – Plant and simulator data has been available for several years. It has been used on previous Evaluated Exercises also with positive feedback.

Davis-Besse – Simulator data is available. Plant data is being mapped to the website and after testing will be released for use. The intent is for the data to be available in the fall of 2012 for use during integrated drills and Dry Run drills prior to the Evaluated Exercise in 2013.