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.

I. 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.

II. 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.

III. 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.

IV. 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 attached at the end of the Board- approved minutes.

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 95001special 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 attached at the end of the Board-approved minutes.

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.

V. 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.

VI. 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.

# NRC Update to the Board

I will update the board on the NRC oversight activities at Davis-Besse, Perry and Beaver Valley.

In addition, I will summarize information from the April 5, 2012, Perry government-to-government and public meetings, the next planned Davis-Besse public meeting, and the NRC orders issued on the Fukushima event.

**Davis-Besse Nuclear Power Plant**

In the March 5, 2012, assessment letter, plant performance was within the Licensee Response column of the NRC Action Matrix. This was based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, the NRC plans to conduct reactor oversight process baseline inspections.

In addition, the NRC identified a human performance substantive cross-cutting issue in the aspect of Documentation and Procedures. In particular, corrective actions taken in 2010 regarding events with the aspect of Documentation and Procedures appear to have been ineffective. Similarly, a limited apparent cause evaluation focusing on this aspect that was completed in August 2011, did not identify any common causes and recommended no additional corrective actions be taken. The human performance substantive cross-cutting issue in the aspect of Documentation and Procedures will remain open until the implementation of effective corrective actions.

Selected upcoming inspections from the 2012/2013 inspection schedule were identified.

**Davis-Besse Public Meeting**

The date of the next public meeting on the Davis-Besse shield building has not been scheduled. There are two NRC inspections still in-progress, one on the root cause analysis and corrective action program, and another on the regulatory review of the licensing basis of the shield building. In addition, a NRC request for additional information was issued to Davis-Besse on the licensing basis of the shield building related to license renewal.

**Perry Nuclear Power Plant**

In the March 5, 2012, assessment letter, plant performance was within the Degraded Cornerstone column of the NRC Action Matrix. This was based on one finding having a low-to-moderate safety significance (i.e., White) from the second quarter of 2011 and a White Occupational Exposure Control Effectiveness Performance Indicator (PI) with four occurrences during the second and third quarters of 2011. The performance indicator threshold for Green-to-White is more than 2 occurrences. The finding and the performance indicator were both in the Occupational Radiation Safety Cornerstone. One of the PI occurrences was in November 2010 and, therefore, no longer counted in the fourth quarter 2011. Additionally, one of the remaining three PI occurrences from the second quarter of 2011 had the same underlying cause as the White finding. Therefore, for the fourth quarter of 2011, in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," the White PI is not considered an Action Matrix input. Despite having only the single White finding as an input to the Action Matrix, Perry will remain in the Degraded Cornerstone Column until a supplemental inspection is completed. The NRC will schedule and conduct the supplemental inspection after Perry has completed an

investigation on the reasons for the White performance indicator and the White finding in the same cornerstone, and have advised the NRC that Perry is ready for the inspection.

Performance at Perry during the assessment period continued to exhibit weaknesses in the area of human performance (HP) with 12 findings identified. This assessment period is the ninth consecutive assessment period in which a HP substantive cross-cutting issue has been identified. In the NRC mid-cycle assessment letter dated September 1, 2011, the NRC advised Perry of substantive cross-cutting issues (SCCIs) in the HP area with cross-cutting aspects of Work Planning and Documentation and Procedures.

Regarding Work Planning, at the time of the mid-cycle assessment, this SCCI was open for eight consecutive assessment periods. The NRC performed an inspection in December 2011, and determined Perry's corrective actions on this SCCI had been successful in reducing the findings and addressing the underlying causes. There were no findings in this aspect during this assessment period and there has been sustained performance improvement. For this reason, the SCCI in Work Planning is closed.

During the same NRC inspection performed in December 2011, regarding the SCCI in Documentation and Procedures, Perry's evaluations and actions had not been completed to allow NRC review. Perry informed the NRC that the facility was ready for the inspection in December; however, the NRC determined while onsite that several key evaluations were not completed. To date, the actions implemented by Perry have not resulted in sustained performance improvement in this aspect. As a result, the Documentation and Procedures SCCI will remain open.

During this assessment period, the NRC identified a new HP SCCI in the aspect of Conservative Assumptions. At the close of 2011, Perry was performing a cause evaluation and the actions taken had not yet proven that Perry was effective at mitigating this aspect. Therefore, the NRC is opening a HP SCCI in Conservative Assumptions. The HP SCCIs in Conservative Assumptions and Documentation and Procedures will remain open until the implementation of effective corrective actions.

Selected upcoming inspections from the 2012/2013 inspection schedule were identified.

**Problem Identification and Resolution Team Inspection**
**Inspection Report 05000440/2012007**

On January 27, 2012, the NRC completed a problem identification and resolution team inspection at Perry. This inspection is an additional inspection authorized by Inspection Manual Chapter 0305, "Operating Reactor Assessment Program, for plants that have entered Action Matrix Column 3, "Degraded Cornerstone." On the basis of the activities selected for review, the team concluded that implementation of the problem and identification process and the corrective action program (CAP) at Perry had varying elements of effectiveness. The licensee normally had a low threshold for identifying problems and entering them in the CAP with some instances of condition reports not generated until after identification by the resident inspectors. Items entered into the CAP were screened and prioritized in a timely manner using established criteria and were evaluated commensurate with their safety significance. However, the thoroughness and effectiveness of some evaluations was found deficient by the team and by licensee audits and self-assessments. The issues with the effectiveness of evaluations including the effectiveness of identifying root and contributing causes, contributed to corrective actions not consistently correcting conditions. The team concluded the licensee's overall implementation of actions that correct issues and prevent recurrence of issues was marginally effective. On the basis of interviews conducted during the inspection, workers at the site expressed freedom to enter nuclear safety concerns into the CAP or to report them to supervision. Based on the results of this inspection, no findings were identified.

**April 5, 2012, Government-to-Government and Public Meetings**

The April 5, 2012, NRC government-to-government meeting was hosted by Lake County and was held at the Emergency Management Operations Center. There were 26 government officials that participated representing Lake County, several area Fire Chiefs, and Local Law Enforcement. The NRC representatives included the Perry Senior Resident Inspector and the Region III Branch Chief responsible for oversight of the plant.

The April 5, 2012, NRC End-of-Cycle public meeting was held at the Quail Hollow Resort in Painesville, Ohio. The public meeting portion of the meeting discussed the 2011 annual assessment results for Perry.

**Beaver Valley**

In the March 5, 2012, 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 2012/2013 inspection schedule were identified.

**NRC Orders on the Fukushima Event**

NRC News Release No. 12-023 communicates that the NRC Commission has authorized its staff to issue immediately effective Orders to U.S. commercial nuclear reactors. This action begins implementation of several recommendations for enhancing safety at U.S. reactors based on lessons learned from the accident at Japan's Fukushima Daiichi nuclear power plant.

Two of the Orders apply to every U.S. commercial nuclear power plant, including those under construction and the recently licensed new Vogtle reactors. The first Order requires the plants to better protect safety equipment installed after the 9/11 terrorist attacks and to obtain sufficient equipment to support all reactors at a given site simultaneously. The second Order requires the plants to install enhanced equipment for monitoring water levels in each plant's spent fuel pool.

The third Order applies only to U.S. boiling-water reactors that have "Mark I" or "Mark II" containment structures. These reactors must improve venting systems (or for the Mark II plants, install new systems) that help prevent or mitigate core damage in the event of a serious accident. Plants have until Dec. 31, 2016, to complete modifications and requirements of all three Orders.

The NRC will also issue a detailed information request to every operating U.S. Commercial nuclear power plant, and certain parts will apply to reactors currently under construction or recently licensed. The request covers several topics, including:

Re-analyzing earthquake and flooding risks using the latest available information;

Conducting earthquake and flooding hazard "walkdowns," where skilled engineers closely examine a plant's ability to meet current requirements;

Assessing the ability of a plant's current communications systems and equipment to perform under conditions of onsite and offsite damage and prolonged loss of all alternating current (ac) electrical power; and

Assessing plant staffing levels needed to fill emergency positions in response to events simultaneously affecting all reactors at a given site.

# First Energy Update to URSB-4/9/12

1) Beaver Valley Power Station

    a) Status of new Emergency Action Levels

The license amendment was submitted on December 23, 2011. The NRC review period is generally one year. They may complete earlier but the site schedule is to get their approval in December of 2012. Training will begin in 2013 with completion in June 2013. Shortly after that the site will cutover to the new EALs.

    b) Progress on Reorganization of Spent Fuel
        i) Spent fuel re-rack project – The project is removing 17 spent fuel pool racks from the Beaver Valley Unit 2 Spent Fuel Pool and replacing them with 15 new maximum density spent fuel racks. This will increase the spent fuel pool capacity from 1088 fuel assemblies to 1650 fuel assemblies. The project is approximately 50% complete. Dose received to date is 118 mrem on a budget of 931 mrem. A total of two Personnel Contamination Events (PCEs) have occurred. One in 2011 and one in 2012. Completion is projected for late July 2012.

2) Davis-Besse Nuclear Power Station
    a) 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 were 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 will be presented at the April 9, 2012 meeting. (See the attached presentation for additional details.

3) Perry Nuclear Power Plant

    a) Status of Cross-Cutting Areas of Human Performance – Plant Lead
        i) Root Cause of Human Performance Issues

For the current assessment period from January 1, 2011, through December 31, 2011, the total number of inspection findings with documented cross-cutting aspects declined from 14 to 12. Performance at the PNPP during the assessment period continued to exhibit weaknesses in the area of human performance with 12 findings identified. For this assessment period:

- The substantive cross-cutting issue in Work Planning, H.3(a), is closed because there were no findings in this aspect during this assessment cycle and there has been sustained performance improvement.
- The substantive cross-cutting issue in H.2(c) Documentation/Procedures will remain open. During a December 2011 inspection, the NRC determined that PNPP evaluations and actions had not been completed to allow NRC review. Additionally, the actions implemented by PNPP have not resulted in sustained performance improvement in this aspect. Specifically, three inspection findings were identified with this aspect as the most significant contributing cause

The NRC identified a new substantive cross-cutting issue in Conservative Assumptions, H.1(b). There were four findings during this assessment cycle in this area. Perry Plant has initiated Root Cause investigations for H.1(b) and H.2(c). The substantive cross-cutting issues in H.1(b) and H2(c) will remain open until the number of findings in the H.1(b) and H.2(c) aspects are reduced and PNPP demonstrates the implementation of effective corrective actions that result in sustained performance improvement in each of these aspects.

Although the NRC noted some improvement in specific areas of human performance during this assessment cycle, concerns with the substantive cross-cutting issues continue to exist. Because the NRC was not able to inspect these substantive cross-cutting issues at the end of 2011, since PNPP had not completed actions, the NRC requested PNPP provide the causes and corrective action planned and completed for the two substantive cross-cutting issues in H.1(b) and H2(c).

ii) Corrective Actions Implemented to Date

Currently, PNPP Perry has four inspection findings with cross-cutting aspect H.1(b) assigned as the most significant causal factor for the performance deficiency. These were investigated at the root cause level. The causes included not having a formalized decision-making process for non-routine management decisions.
Some individuals had a desensitized appreciation for the NRC Reactor Oversight Process and exhibited shortcomings in their decision-making

A number of corrective actions have been developed to address the causes including the incorporation of a decision-making aid from an industry best practice documented and explained in INPO 07-006 "HUMAN PERFORMANCE TOOLS FOR MANAGERS AND SUPERVISORS." The job aid assists leaders in making decisions under non-routine situations or when it is recognized a person is in knowledge-based space. Other corrective actions involve industry benchmarking to learn best practices for conservative decision-making, procedure changes to implement process improvements with decision-making, and training so that personnel can challenge assumptions when making risk and safety significant decisions. Also, included are establishing metrics to monitor performance with decision-making and performing self-assessments of risk and safety decisions to review and assess performance.

Corrective actions are scheduled to be completed by the end of 2012, except for the long-term effectiveness reviews and self-assessments that are scheduled for March 2013 and March 2014. Metrics established for decision-making and use of conservative assumptions include tracking and quarterly self-assessment of risk decisions, and the Operational Focus Index.

**H.2(c) Resources, Documentation/Procedures**

Currently, PNPP has three inspection findings with cross-cutting aspect H.2(c) assigned. The H.2(c) issues were also investigated at the root cause level. The cause was determined to be that management

oversight associated with performance standards and expectations have not kept pace with the increasingly higher industry standards for procedure, documents, and work instruction quality. Again, a lack of understanding of the NRC's Reactor Oversight Process contributed to not achieving sustained improvement in the cross-cutting aspect H.2(c). Some knowledge deficiencies were also identified in this area.

Corrective actions included reinvigorating PNPP's corrective action program implementation. Other corrective actions involve training, industry benchmarking, procedure changes, and establishing metrics to monitor performance with decision-making. Corrective actions are scheduled to be completed by the end of 2012. Effectiveness reviews of the corrective actions are planned for November 2012, after completion of refueling outage 1R14, and two years from completion of the root cause evaluation in March 2014. Metrics are established for procedures and work orders include procedure and preventive maintenance work load, work package quality, and worker feedback forms.

iii) Reasons for Delaying NRC Confirmatory Inspection

The following is excerpted from L-11-304 dated September 30, 2011.

In the Annual Assessment Letter for PNPP Unit 1, dated March 4, 2011, the NRC stated that, 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. The PNPP staff requested that the inspection be rescheduled for November or December 2011 to allow for additional assessment and corrective action activities.

A common cause analysis was completed during June and July of this year [2011] for events that occurred during the most recent refueling outage at PNPP. The identified causes addressed a number of management and organizational issues. A corrective action plan was developed and is in progress to create organizational alignment, improve employee ownership and accountability, and improve management interactions with employees. A Human Performance Action Plan is implementing short-term and long-term actions to sustain human performance improvement. In addition, a number of root cause evaluations are being conducted in response to the performance issues addressed in the NRC's Mid-Cycle Letter for PNPP. These evaluations, which are expected to be completed near the time the inspection is scheduled to occur, may provide additional insights for your review. The PNPP staff has been in contact with NRC Region III staff regarding the scheduling of these evaluations and their potential value to the inspection.

b) Joint Information Center at Lakeland Community College

Lakeland Community College approached FENOC with a request to evaluate moving the present Joint Information Center (JIC) to another location on the Lakeland campus. Several meetings were held to discuss alternative locations. Additional locations apart from the campus were considered by FENOC as well. A suitable alternate was found. It is outside the 10 mile EPZ but just inside one of the sub areas. FirstEnergy discussed this with FEMA Region 5 and got a positive verbal response. Working with OEMA a letter has been sent requesting formal FEMA acceptance of the alternate location. It was decided that the change at this time would not undertaken and Lakeland agreed to honor the existing contract through December 2012. Lakeland Community College and an alternative site apart from Lakeland remain under consideration for 2013.

4) FirstEnergy Fleet

a) Status of MIDAS program
   i) Beaver Valley – MIDAS is available at the station and the new EOF/ Alternate TSC with auto population of data. Unit 1 and 2 simulators do not model all the data points necessary for either the old or new version of MIDAS. The station and fleet are working on a method to feed data to MIDAS during drills and exercises to allow the simulators to function similar to the actual plant data.
   ii) Perry – MIDAS is available at the station and the new EOF/ Alternate TSC with auto population of data. The Perry simulator does model the data necessary for MIDAS and those functions are also working.

   iii) Davis-Besse – MIDAS for DB continues in the testing phase. License changes are needed before DB will be able to use MIDAS. Updating to Reg Guide 1228 for source term is needed. It is expected that this will take some time since the NRC review period is normally one year. The current dose assessment program (PCDose) will be used in the new EOF/Alternate TSC until approval of source term changes is received.

b) Data for Dose Assessment with RASCAL

Each of the sites is able to provide the information necessary to run RASCAL (uci/sec). We demonstrated it during the NRC participation drills for Beaver Valley and Perry in 2010. The information is not a plant readout but a calculated value provided, upon request, by the dose assessment individuals. Beaver Valley Unit 2 displays the information for steam generator relief valves on the screen. Perry provides the information for the four monitored release paths to allow individuals to calculate the values – Counts per minute (CPM) or uci/cc and flow rates in thousands of cubic feet per minute (KCFM). Davis-Besse will also display Station Vent counts per minute (CPM) or uci/cc and flow rates in thousands of cubic feet per minute (KCFM).

c) Status of new Emergency Operations Facilities
   i) Beaver Valley – Ribbon cutting was held on 3/30/12. The facility is fully operational.
   ii) Perry – Final walkthrough punch list items are being completed. Target cutover to the facility is slated for June 2012.
   iii) Davis-Besse – Additional work is needed on the sanitary system and paving of the parking lot. These actions are waiting for better weather. The facility has been walked down and the contractors are working final punch lists. Two license amendments are needed to cutover to the new facility. One for the updated source term for MIDAS and one to extend three 30 minute responders for the EOF on day shift. Rule making shift staffing is expected to be completed in the fall with submittal of the license amendment shortly there after. A one year NRC review period is required so it is expected that DB will cut over to the new EOF/TSC and use of MIDAS in the fall of 2013.

d) Evacuation Time Estimates

Davis-Besse and Perry documents have been prepared, reviewed and are ready for submittal. The Beaver Valley document is in a second draft after internal FENOC comments. The updated draft will be back by mid-April and it will go out for state and county review with comments due back by the end of May. The comments will be incorporated by the vendor and then a final review meeting is planned for mid-July after the Beaver Valley Evaluated Exercise. All three site's ETE reports will be submitted in December, 2012.