

**UTILITY RADIOLOGICAL SAFETY BOARD OF OHIO
MEETING MINUTES
JANUARY 5, 2009**

Ms. Nancy Dragani called to order the January 5, 2009 meeting of the Utility Radiological Safety Board of Ohio at 1:30 p.m.

The first order of business was roll call, taken by Ramona Hauenstein.

I. ROLL CALL

EMERGENCY MANAGEMENT AGENCY	MS. NANCY DRAGANI
DEPARTMENT OF HEALTH	MR. ROBERT OWEN
DEPARTMENT OF AGRICULTURE	MR. CHUCK KIRCHNER
PUBLIC UTILITIES COMMISSION	MR. SHAWN SMITH
ENVIRONMENTAL PROTECTION AGENCY	MS. CINDY HAFNER
DEPARTMENT OF COMMERCE	MR. DEAN JAGGER

A quorum was declared.

II. READING OF THE OCTOBER 14, 2008 MINUTES (ADOPTED)

Ms. Dragani asked for any additions, corrections or deletions to the minutes. She then asked for a motion to approve the October minutes. Mr. Shawn Smith of the Public Utilities Commission (PUCO) moved and Mr. Owen of the Ohio Department of Health (ODH) seconded. The motion was carried.

III. OLD BUSINESS

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

The Beaver Valley Power Station Partial Participation Exercise Final Report has been received. There were no findings for the State of Ohio and two Areas Requiring Corrective Action (ARCA's) for Columbiana County. The one was a new finding and the other was a previous finding. The new finding was criteria 6.2.1; monitoring of emergency workers, the previous was criteria 5.2.1 – emergency information.

The Perry NPP full participation draft report has been received. There were no findings for the State of Ohio and 2 ARCA's for the counties. One for Lake County regarding dosimetry and the other for Geauga County was regarding vehicle monitoring. The ARCA's were successfully re-demonstrated at the time of the exercise.

The strengths for the State were outstanding coordination between the executive room, assessment room and the Joint Information Center (JIC). In addition, the Field Monitoring Team (FMT) Coordinator (John Wills, Perry area Radiological Analyst) did an excellent job considering that he only had 24 hours notice that he would perform in the position due to the hospitalization of the primary FMT Coordinator and the secondary attending a funeral. PIO also caught an error in public information which avoided confusion.

The Reactor Oversight Matrix was reviewed. All FENOC plants are in Column one, which is normal oversight.

Ingestion Zone Reentry Recovery Advisory Group (IZRRAG) training was conducted on November 7, 2008. Training will continue to be conducted annually with a table-top exercise being conducted every odd year. The next evaluated ingestion exercise will be with Perry in 2012.

Under plant oversight: Davis-Besse is in the last of the five year annual assessments required; however, the final reports have not been issued yet.

The Confirmatory Order letter issued in 2007 on regulatory sensitivity will be closed after one more review, hopefully this month. An effectiveness review was conducted in January 2008 with positive results. An additional effectiveness review will be conducted in January 2009. Upon successful completion of the 2009 review, it is anticipated that the Confirmatory Order will be closed.

On October 22, 2008, Davis-Besse personnel discovered elevated levels of tritium associated with a drainage line leak during the excavation of a fire suppression line. The plant conducted sampling of their on-site monitoring wells. The sample results indicated that there was no movement of the tritium beyond the immediate area.

E-data is sent to the State, which used it the first time for the Perry exercise last fall. The State found it to be a very good, helpful application. We expect to use it for the Davis-Besse exercise.

Teletrix (Plume Tracker) software was a good investment. The State intends to purchase another unit this year. This will give us three – 1 for each FMT. This software provides more realistic training for the teams. Although the Field Monitoring teams will not be evaluated during the Davis-Besse exercise, they will use Plume Tracker during the dry run.

The State is trying to upgrade the CDV (Civil Defense Victoreen) equipment. We have purchased the last of the Ludlum model 3's to replace to CDV 700 RP's. They should all be replaced this year. We are doing kit exchanges in the Perry and Davis-Besse area. Pencil dosimeters are now at acceptable levels after the old equipment (over 40 years old) started failing. The State has recently purchased replacement pencil dosimeters. EMA is working on a 5 year plan on how to

update/upgrade all the CDV equipment and will present it at negotiations with FirstEnergy.

The Comprehensive Review has been received by the Perry plant; however the security part has to be redacted so it can be reviewed in a public forum. Mr. Higaki of FirstEnergy stated it may come down to a security briefing.

The After Action meeting was conducted on November 5, 2008 and the after-action matrix updated with new information following the Perry exercise.

The final Hostile Action Based Drill for Ohio is this month for the Beaver Valley plant on the 27th.

Mr. Stephen Helmer of the ODH updated the Board on the status of the initiatives led by Health.

Dose assessment: we are currently moving forward with the E-data system and getting that in place before doing anything with the dose assessment. We will continue to work with FENOC.

Potassium Iodide (KI): Current KI is due to expire in May 2009. ODH has placed their order with the NRC. ODH has held 2 conference calls with the local health departments and EMA's. They will try to have the old KI replaced by April 2009. The tablets will be 65 mg, the current ones are 130. Population numbers have been confirmed with the local agencies. Health is expecting the supply to arrive any week now. ODH will hold another teleconference after they received the KI to talk about distribution.

B. **Midwestern Report**

Mr. Robert Owen gave a report from the Midwestern Committee meeting.

Yucca Mountain Update

The NRC is planning to complete their full review of the license application by DOE to construct the repository and render a decision within the two-year timeframe prescribed by law. An additional year is permissible, if the NRC declares that this is needed in order to complete the comprehensive review. As reported by the NRC at the meeting, they will be working through the holiday and sticking to the schedule that will ensure a two-year turnaround.

On October 31, 2008, DOE published a revised proposed policy for implementing Section 180(c) of the Nuclear Waste Policy Act. The proposed changes provide the funding allocation approach for grants to federally recognized tribes which may be eligible for assistance. A letter was sent from DOE to all governors potentially affected by Section 180(c). Ohio will not be submitting comments back to DOE since we do not have any recognized tribal lands.

DOE's National Transportation Plan for shipments to Yucca Mountain will be issued on January 20. There will be a 120-day comment period.

Security Briefing

The Midwestern Committee has been seeking security information regarding transportation casks that will assist states in planning for these shipments. Toward this end, the NRC will provide a security briefing to committee members at their headquarters in Washington, DC during the fall meeting this year. There was discussion on proposing a joint meeting with other regions in conjunction with this briefing.

Future Meetings

As previously announced, DOE has proposed supporting only one committee meeting per year. The committee will continue its plans to conduct a spring meeting in June, since the funding is available to do so. DOE has not made a final decision on this. The CSG will draft a letter from the committee to DOE asking for clarification of the letter announcing the proposed action. If the funding is available, the committee believes that two meetings per year should be allowed to occur. The Western Governor's Association has issued a letter to DOE opposing the change, citing that a reduction in interaction with the states is not the way to go.

IV. NEW BUSINESS

B. Nuclear Regulatory Commission (NRC)

Mr. Allan Barker was present to report for Region III of the NRC. Mr. Barker updated the Board on the NRC oversight activities at Davis-Besse, Perry and Beaver Valley. He discussed the NRC survey results from residents of nuclear power plant emergency planning zones that was issued in NUREG-0654, Supplement 3, "Criteria for Protective Action Recommendations for Severe Accidents," and some upcoming regulatory activities.

Davis-Besse Nuclear Power Plant

NRC Quarterly Integrated Inspection Report

On October 23, 2008, the NRC issued its quarterly, integrated inspection report for Davis-Besse.

The NRC identified one green non-cited violation of very low safety significance for work planning and reviewing licensee personnel's failure to identify applicable post-maintenance testing requirements following replacement of the lube oil cooler for the Motor Driven Feed Pump.

Perry Nuclear Power Plant

NRC Quarterly Integrated Inspection Report

On October 27, 2008, the NRC issued its quarterly, integrated inspection report for Perry.

The inspection results were three NRC-identified findings and four self-revealed findings of very low safety significance (GREEN). Five of the seven findings involved violations of NRC requirements. The findings involved risk management during work activities, adherence to procedures and maintenance practices.

Beaver Valley

NRC Quarterly Integrated Inspection Report

On November 12, 2008, the NRC issued its quarterly, integrated inspection report for Beaver Valley.

The NRC identified one green non-cited violation of very low safety significance for a failure to properly implement procedures and required actions in planning, tagging, and electrical system operation. A series of procedural use errors in control of maintenance, equipment control and electrical system operation resulted in the inadvertent loss of the 1G 4160VAC (4kV) electrical bus.

Notice of Enforcement Discretion

On October 22, 2008, the NRC issued Beaver Valley 1 a Notice of Enforcement Discretion authorizing a one-time extension to the length of time the plant could operate at full power with the 21A Low Head Safety Injection Pump out of service.

On October 23, FENOC determined that it could not complete the pump repairs within this extended timeframe. FENOC did not request an additional extension, and instead determined to shut down the plant and complete the repairs. The NRC agreed with First Energy's decision, and determined that there was no increase in risk from shutting the plant down. On October 28, FENOC completed the repairs and restarted the unit.

Special Inspection Team

On November 11, 2008, the NRC sent a Special Inspection Team (SIT) to review the circumstances surrounding the identification of air that had been trapped in a safety system at Beaver Valley Unit 1. The NRC conducts such incident investigations in response to actual or potentially-significant operational events. A Special Inspection is the lowest level response.

On September 23, FENOC detected air (called a "void") in the suction lines for both trains of the Beaver Valley 1 low-head safety-injection system (LHSI). The

LHSI is one of the systems that supply water to the reactor in the event of an accident at the plant. It is also used to circulate cooling water following an accident. At the time, FENOC determined that the system would have operated as designed. An inspection report detailing the team's findings will be issued 45 days after the end of the inspection.

License Renewal Application

The current operating licenses for Beaver Valley 1 and 2 expire in 2016 and 2027, respectively. FENOC submitted an application in August 2007, requesting renewal of the operating licenses for an additional twenty years.

On October 30, the NRC staff held a public meeting to present an overview of the draft Supplemental Environmental Impact Statement and to accept public comments on the document. The transcripts from these sessions are publicly available in ADAMS under the Accession numbers: ML083250519 and ML083250520.

On November 12, 2008, NRC Region I staff held a public meeting to present the results of its inspection of aging management programs in place to support the plant's proposed license renewal.

NUREG-0654, Supplement 3, "Criteria for Protective Action Recommendations for Severe Accidents"

Mr. Barker reported on a national level public telephone survey that was conducted among residents of nuclear power plant emergency planning zones (EPZ). The survey was designed to support assessment of public response. The survey was authorized by the United States Office of Management and Budget in accordance with the Paperwork Reduction Act of 1995, and was conducted in March of 2008. Survey data indicates the following tendencies among the public residing within EPZs:

- Residents are generally well informed about what to do for an NPP emergency;
- Most residents remember receiving emergency response information from the NPP and keep it readily accessible;
- Most residents recall receiving information regarding evacuation and sheltering;
- Most residents would evacuate, shelter or monitor for more information if so directed;
- Most residents would support a staged evacuation order, (i.e., shelter while others evacuated);
- Many parents will go to schools to pick up children even if told they are already being evacuated; and
- Most "special needs" persons, not in special facilities, have not registered for evacuation assistance.

Ms. Dragani asked Mr. Barker what the NRC intended to do with this information – i.e., would they come out with recommendations for the states? Mr. Barker said he would get more information and report back at the next URSB meeting. Ms. Dragani recommended that the members of the Board read at least the executive summary, then prepare to have a discussion at the April meeting. Ms. Dragani noted that if the NRC took the time to perform this study, something should be done with the results. Mr. Sean Zalesny of Ohio EMA stated they will revise Supplement 3 which is criteria for protective actions. This study will be used as part of that revision as well as the information gathered from the hostile action based drills. Ms. Dragani asked Ms. O’Claire and Mr. Zalesny to get a copy of this item, as well as another NUREG, *Assessment of Emergency Response Planning and Implementation for Large Scale Evacuations* to the members of the Board. This NUREG deals with the issues found during the evacuations of the public during Hurricanes Rita, Katrina and Wilma. Mr. Owen asked if there will be a public comment period. If the changes come out as a revision to Supplement 3, there will be. The target is to make all the changes by 2010.

Mr. Clayton of the Environmental Protection Agency (EPA) asked why parents stated they would go to the school; was it a matter of not caring that they are being evacuated and getting there before that or was there confusion about where they should go to pick them up. Also, does the survey measure that kind of difference?

It seems to be mainly the parents wanting the children with them instead of being separated at different centers. It was noted that this question is why looking at the data would be helpful to see how the questions were framed.

Mr. Zalesny stated that one of the issues mentioned at the scheduling conferences he has attended is that the clearer public information is, the more likely the public is to comply.

Upcoming Regulatory Activities

Each calendar quarter, the resident inspectors and regional inspection staff, review the performance of all nuclear power plants, as measured by the performance indicators and by inspection findings. Every six months the review involves a more detailed assessment of plant performance that includes staff from NRC headquarters, the regions, and resident inspectors as well as preparation of a performance report. Also every six months, based on plant performance reviews, NRC inspection plans for each reactor are determined for the following 18-month period. The performance reviews and inspection plans for Davis-Besse, Perry and Beaver Valley will be presented at the April URSB meeting.

A public meeting will be held on Wednesday, January 14, to discuss the FENOC fleet wide performance with FENOC management. The meeting location is the Perry Schools Manchester West Training Center, at 4261 Manchester Avenue in Perry, Ohio.

FENOC

Beaver Valley Power Station

NRC special Inspection regarding--September 23 detection of air in the suction lines for both trains of LHSI (Low Head Safety Injection)

Beaver Valley staff was evaluating systems for potential air entrapment in response to NRC Generic Letter 2008-01: "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems." They identified 4.065 cubic feet on the A train and 3.861 cubic feet on the B train of Low Head Safety Injection system.

NRC Region I special team inspection was sent to Beaver Valley on November 12. Preliminary inspection results include potential for one Green finding. The finding is characterized as low safety significance since the pump performance would not have been affected and they would have been able to perform their safety function.

The inspection report has not yet been issued, but should be received in January 2009.

October 23, 2008 Unit 2 shutdown

Beaver Valley Unit 2 was shutdown on October 23 when the low head safety injection pump could not be returned to operable status within the time frame allowed by technical specifications. The pump was taken out of service on October 19 for routine preventive maintenance. During the maintenance activities, plant staff identified the pump shaft would not rotate freely. FENOC requested and was granted a Notice of Enforcement Discretion from the NRC to extend the out of service time for the pump. The NRC allowed 36 hours beyond the 72 hours allowed by technical specifications. Plant staff disassembled and reassembled the pump, but identified binding of the pump shaft again after disassembly.

Plant management conservatively shut the plant down even though there was time remaining as allowed by the NRC.

The problem solving team identified a location in the inboard casing of the pump where a dimension was not correctly machined and was the root cause for the additional friction and galling of the internal wear rings.

Repairs were made to the pump and the plant was returned to service on October 27, 2008.

November 17, 2008 notification of October 16, 2008 auxiliary feed pump rotation due to failure of solenoid valves

On October 16, 2008 during a routine clearance restoration activity, two solenoid operated steam supply isolation valves on one of the three steam lines to the steam-

driven auxiliary feed pump unexpectedly opened admitting steam to and causing the pump to rotate.

The control room operator quickly recognized the condition and attempted to close the same valves from the control room. A local operator involved in the restoration activities of opening a separate manual upstream steam isolation valve also recognized the unwarranted system response and closed the upstream isolation valve to terminate the steam supply. The pump rotated for about 30 seconds. The plant computer indicated no auxiliary feedwater had been pumped into the steam generators.

The design for the two solenoid operated isolation valves are susceptible to briefly popping open if steam is initially introduced too rapidly. The safety function of these valves is to fail open. A large steam rush can briefly overcome the solenoid force holding the valves shut.

This is what occurred on October 16 and the system was not initiated by a valid actuation signal and therefore not reportable under 10 CFR 50.72.

However, 10 CFR 50.73 requires this circumstance to be reported by submittal of a Licensee Event Report, but gives an option to make a verbal report under 10 CFR 50.72 which is the action the Beaver Valley staff took in lieu of submitting a Licensee Event Report.

Davis-Besse Nuclear Power Station

November 13, 2008 - Hostile Action Based Drill

This unique drill used the guidance from NEI 06-04 Conducting a Hostile Action-Based Emergency Response Drill, Revision 1. All Davis-Besse Emergency Response Facilities (ERF) were involved. Offsite involvement included the Ottawa County Emergency Operations Center, the State of Ohio Emergency Operations Center and an Incident Command Post.

The Incident Command Post was established with participants from law enforcement, fire, emergency medical services, Coast Guard and FBI. In addition an ambulance from Carroll Township and one from Mid-County responded to the station to transport simulated injured/contaminated plant personnel. One Carroll Township fire truck responded and interfaced with the station fire brigade. The scenario simulated a number of simulated injured/contaminated individuals and fatalities.

Lesson Learned:

- Impact of delays in mobilization of the emergency response organization due to hostile action environment and communications between on and offsite response organizations.
- Improvements in procedures for communications with the Incident Command Posts.

- Challenges to determining the number and status of multiple causalities and fatalities.
- Additional burdens placed upon Joint Information Center to maintain appropriate control on information during the security event regarding safe guards' information and the associated law enforcement response.
- Improvements for station personnel immediate response to fires and medical emergencies and conducting damage assessments.

Independent Assessments

2008 Confirmatory Order Independent Assessment Schedule					
Assessment	Submit Plan	Conduct Assessment	Exit & Draft Report to DB	Final Report To DB	Final Report To NRC
Operations Performance	Complete	Complete	Complete	Complete	Complete
Corrective Action Program	Complete	Complete	Complete	Complete	Complete
Engineering Program Effectiveness	Complete	Complete	Complete	Complete	Complete
Safety Culture/SCWE	Complete	Complete	Complete	Complete	January 26, 2009

Operations Performance and Corrective Action Program assessment results were debriefed to the USBR earlier in 2008. The results of the Engineering Program Effectiveness assessment are summarized as follows:

Davis-Besse engineering program was rated as effective. The team rated each of the six assessed areas as effective. The six areas included:

- Plant modification process
- Calculation process
- System engineering program and practices
- Self assessment effectiveness
- Engineering implementation of the corrective action program
- Corrective actions taken in response to the areas in need of attention identified during the 2007 engineering independent assessment

The assessment was conducted by way of personnel interviews, observations, and document reviews.

One area of strength was identified associated with engineering workload management used over the past two years which improved refueling outage modification preparations. There were no areas for improvement identified and there were three areas in need of attention identified.

The three areas in need of attention pertain to the following:

- Post installation testing instructions,
- AC system power calculations
- Some 2007 assessment items remain open

Extended interim storage of LLRW

In June, 2008, the disposal facility at Barnwell, South Carolina was closed to out-of-compact members, including FENOC for receipt and burial of low level rad waste. Since then, FENOC continues to process and dispose of Class "A" rad waste specified by the Life Of Plant Agreement with Energy Solutions. Class "B" and "C" rad waste generated are currently stored on-site. Davis-Besse has the capacity to store low level rad waste on-site in the Low Level Rad Waste Storage Facility for 21 years.

In the meantime, FENOC is currently working on a fleet-wide contract with an offsite vendor capable of taking title and possession of Class B and C low level rad waste. The contract should be completed in the spring of 2009.

October 22, 2008 – Tritium leak

Wednesday afternoon, October 22, 2008, an excavation crew working at Davis-Besse discovered water leaking from a 3" carbon steel pipe from the turbine and water treatment building to the settling ponds on plant property.

Analysis of the water leaking from the discharge pipe indicated the presence of tritium at a concentration of approximately 37,500 picocuries per liter. This value is in contrast with 20,000 picocuries per liter that is the standard for tritium for drinking water and does not exceed any state or federal regulations. Courtesy notifications were made to the Nuclear Regulatory Commission, as well as state and county officials.

There is no potential impact to the health and safety of the public. In fact, the concentration found at Davis-Besse is so weak; its presence can't be detected by a Geiger counter.

The damaged line was removed from service and the discharge water has been rerouted to the settling ponds. The line was repaired in December.

A thorough sampling plan confirmed the discharge water was confined to plant property.

December 24, 2008 – turbine taken off-line

On December 24th at 0330 the operating crew noticed smoke coming from the area around the #2 bearing of the high pressure turbine. Operations commenced a rapid shutdown at 0530 and at 0754 removed the turbine/generator from service. The outage control center was mobilized and troubleshooting commenced identifying an oil leak on the #2 bearing. Disassembly of the oil deflector on the #2 bearing revealed an issue with carbon build-up in the oil deflector causing it to not function as designed.

The carbon build-up caused oil to travel down the turbine shaft spreading oil to the insulation adjacent to the bearing. The oil saturated the insulation and contacted the hot piping causing smoke to be observed by the operators.

The cause of the carbon build-up is believed to be the long term result of high temperatures from steam piping near the bearing oil deflector. All oil soaked insulation was removed. The turbine bearing oil deflectors were cleaned and reinstalled. The bearing cover was reassembled and the turbine lube oil system was re-started for post maintenance testing. After it was verified that no leaks existed, new insulation was installed in the bearing area. The Reactor remained critical at approximately 18% power through this time period. Operators closed the breakers to synchronize the generator to the grid at 2148 Saturday. The total outage time was just under 86 hours.

Perry Nuclear Power Plant

February 2009 Refueling Outage

Perry Plant will begin its 12th refueling outage on February 23, 2009 and is scheduled to complete in mid-April.

IR12 Scope - 1858 Work Orders

Major Projects-

- Complete Installation of the Alternate Decay Heat Removal System
- Perform Chemical Decontamination of Reactor Recirculation System piping
- Replace Reactor Recirculation Pump B motor
- Reactor Refueling – Complete Off-Load/Reload the Core
- Replace 10 Control Rod Blades
- Perform the 10 Year Inspections of the RPV – 250 specific internal inspections
- Refurbish 136 Motor Operated Valves & 91 Air Operated Valves
- Turbine Generator Work-
 - Disassemble, Inspect and Re-assemble Low Pressure (LP) “A” rotor,
 - Disassemble, Replace and Re-assemble LP “C”
 - Disassemble, Inspect and Re-assemble High Pressure (HP) rotor

Dry Cask Storage

Status update of Perry Dry Cask Storage project is as follows:

- Design Change package development in progress with the major design change packages (storage pad, haul path, security changes) to be completed and issued during the 1st quarter of 2009.
- Some construction activities (hydro-excavation, underground mitigation) will occur in early spring, with the major work to begin after refueling outage 12.
- The focus during 2009 will be modification installation, which will include major excavation work east of the Unit 2 buildings starting in June, and the upgrade of the Fuel Handling Building crane during the second half of the year.
- Procedure updates, training and dry runs are slated to begin late in the year with the arrival of major equipment/components (casks, ancillaries).

FENOC

Common dose assessment program

Research and information gathering from dose projection software program vendors remains on the agenda, but did not make progress during the past quarter due to other activities including the Beaver Valley hostile action based drill. FENOC's intent remains to schedule vendor presentations in the near future for the combined utility and State staffs for gaining a better understanding of the bases and flexibility of the various products, then to make a collaborative decision on which product to recommend and develop and move forward with a funding and project plan.

Current dose assessment programs remain accurate and satisfactorily functions to provide dose assessment requirements for FENOC plants.

Status of E-data

Perry Plant actual and simulated data is being provided via secure website and other access security provisions. ERDS data points have been identified for the Perry Plant and steps continue to make ERDS available on the same platform as E-data. Enabling access to Beaver Valley real plant information is very close to completion. Beaver Valley simulator data will require additional work as debriefed in 2008 with the URSB. Davis-Besse equipment requirements and project plan will be developed in 2009.

Events of Potential Public Interest

There remains an open item with Ohio Emergency Management Agency for 10 CFR 50.72 notifications. The current protocol establishes criteria for notification of many items that go beyond the requirements of 10 CFR 50.72, but does not require FENOC contact of the agency for all conditions of 10 CFR 50.72. Any plant notification to NRC is posted on the NRC website the next morning. The agencies desire is to have notice from FENOC prior to the start of the business day for all FENOC 10 CFR

50.72 reports to the NRC. Further discussion between FENOC and OEMA is needed on this topic.

IV. MISCELLANEOUS

The next meeting of the Utility Radiological Safety Board will be April 6, 2009. The rest of the meetings for the Board in 2009 will be July 7 and October 5.

V. ADJOURNMENT

Ms. Dragani asked for a motion to adjourn. Mr. Owen moved and Shawn Smith of the PUCO seconded. Motion passed.

DATE

UTILITY RADIOLOGICAL SAFETY BOARD