

Joint Meeting of the Radioactive Materials Transportation Committee and the Transuranic Waste Transportation Working Group

Hilton New Orleans Riverside Hotel
New Orleans, Louisiana
December 9-10, 2015

Meeting Summary

The Southern States Energy Board's (SSEB) Joint Meeting of the Radioactive Materials Transportation Committee and the Transuranic Waste Transportation Working Group occurred on December 9-10, 2015. The event was held at the Hilton New Orleans Riverside Hotel in New Orleans, Louisiana.

Mr. Christopher Wells, Assistant Director of Nuclear Programs for the Southern States Energy Board, welcomed the group and provided logistical and administrative meeting announcements. Following these comments, Mr. Wells turned the meeting over to Mr. Alan Jacobson (Maryland), Chair of the Radioactive Materials Transportation Committee, who gave a brief opening remark and initiated the introduction of all meeting participants.

The first speaker of the event was Mr. David Pstrak representing the Nuclear Regulatory Commission (NRC). Mr. Pstrak informed the group he would be providing a brief overview of several ongoing activities at the Commission including the Yucca Mountain License Application, spent nuclear fuel storage and transportation, interim storage, studies, risk assessments and tribal policy. He began by summarizing the five volumes of the safety evaluation report and explaining how this information along with the completion of the supplemental environmental impact statement would contribute towards the license application for Yucca Mountain. Next, he gave a nationwide depiction of how spent fuel is managed (pools, interim storage systems) and the processes licensees must undergo to prove their ability to safely store and monitor fuel for up to periods of 40 years. Mr. Pstrak discussed the interim storage site proposals brought forth by both the Waste Control Specialists and the Holtec International and Eddy-Lea Energy Alliance. He illustrated the difference in the two design systems and noted both are anticipated to apply for a license in 2016. He explained the undertaking by the NRC to continue its risk assessment and studies to examine spent fuel transportation during both routine and accident conditions. The current investigation is the fourth within the past 35 years and involves the direct examination of NRC-certified rail and truck casks in addition to extra-regulatory thermal conditions on these transportation packages. Finally, Mr. Pstrak concluded his presentation with a review of the NRC's Draft Tribal

Policy Statement which outlines methods of interaction and processes for conveying safeguards information with tribal jurisdictions impacted by shipments of spent nuclear fuel.

The next segment of the meeting involved a discussion on the progress of the Section 180(c) exercise and the resulting outcomes since its inception. Mr. Elgan Usrey, Southern States Energy Board, served as the lead SSEB representative along with the volunteer states of Texas and North Carolina for participation in this mock demonstration of the grant process. Mr. Usrey provided the results of a survey conducted amongst the volunteer state participants to determine what has been learned thus far from the exercise. Some of the results included a better understanding of "allowable activities" or those operational measures which would be covered by the grant. Several respondents also noted the exercise was a lot more time consuming than anticipated. Another valuable experience reported from the exercise was the opportunity to receive feedback from the merit review panel regarding the budget justification. The states conveyed DOE gained a better understanding of their (state) processes including budgetary operations, communications and resources required to build a program to support a national shipping campaign. States indicated they would have liked to have seen evaluation of the Section 180(c) funding formula and they also recommended DOE's geographical information system, Stakeholder Tool to Assess Radioactive Transportation (START) was practical for generating routes but needed further development to be useful in determining training needs. Mr. Usrey ended his comments by stating the exercise was a good starting point for working out some of the nuisances of establishing a large grant program, but the exercise should be continued to examine other elements such as the formula to develop more realistic cost for the scope of the program.

The Georgia WIPPTREX was a subject included amongst the round of presentations offered on the first day of the meeting. Mr. Mark Wyland, Georgia WIPP Coordinator, provided the update. He began with a precursory overview of the Georgia program including the WIPP routes thru the state, impacted counties, instrumentation distributed along the route, and the training regimen undertaken in the state. Next, Mr. Wyland shifted his focus to the actual exercise providing the audience with a timeline for the planning of the exercise and the training conducted in preparation for the exercise. The scenario involved a WIPP truck, a passenger car and a delivery van carrying radioactive material. The design was intended to allow first responders to mitigate a scene with disbursement of radioactive materials as opposed to a mass casualty accident. The exercise duration was three days of tabletop and a full-scale exercise to allow all shifts of first responders the opportunity to participate. After the formal presentation, Mr. Wyland showed the group a video detailing the specifics of the 2015 Georgia WIPPTREX.

Ms. Christina Edwards, Regional Response Coordinator for DOE Region3, was the next speaker and gave an update regarding DOE's Radiological Assistance Program (RAP). The RAP provides radiological assistance and training to other

federal agencies, states, tribes and local agencies in response to a nuclear/radiological event. She displayed a map showing RAP regional contacts and noted assets are deployable within 2 hours of team activation and can arrive on-scene within 6 hours. She reviewed the different mission tracks of the RAP program including Consequence Management which deals with radiological monitoring and contamination control and Crisis Response which addresses search, detection and identification of radiological materials. She talked about the training offered via the RAP Team and the various types of instrumentation used by members. She indicated that RAP operates within the confines of the Incident Command System and does not preempt authority. Ms. Edwards talked about how the RAP Team participates in exercise such as the WIPPTREX and offers support services for activities such as NASA Space Launches, the Super Bowl, NASCAR events, presidential debates, etc. The remainder of the presentation was dedicated to the Aerial Measuring System and Mobile Detection Deployment Unit which use aircraft, vehicles and detection equipment to expand the scope and range of identifying radioactive sources.

Mr. Richard Arnold, Pahrump Paiute Tribe of Nevada, and Ms. Heather Westra, Prairie Island Indian Community of Minnesota were next to address the audience regarding tribal perspectives on emergency response and radioactive materials transportation. Mr. Arnold spoke about how it was important to recognize the tribes from their legal status which is equivalent to a state. Furthermore, he stressed that although states and tribes are different there was value to collaborating on transportation issues because of the geographical proximity and shared objective of achieving safe, secure and efficient transport. Ms. Westra discussed similar topics as Mr. Arnold and reiterated the important theme of collaboration based on the current situation of the Prairie Island Community. She described how the Indian Community is adjacent to the Prairie Island Nuclear Generating Plant and its independent spent fuel storage installation and thus communication and cooperation are of the utmost importance. Both parties agreed to work with SSEB on bridging gaps and developing and fostering relationships with tribes located in the region.

The first day of the meeting ended with Mr. Mike Wangler of DOE/EM's Office of Packaging and Transportation providing a short briefing about the National Transportation Stakeholders Forum (NTSF). Mr. Wangler explained the origins of the NTSF including the purpose, goals and objectives and functioning of the planning committee in handling the administrative and logistical matters of the annual meeting. He yielded the remainder of his time to Mr. Wells who gave the group more specific details regarding the upcoming June 2016 meeting in Orlando, Florida.

The second day of the meeting began with an administrative business session led by Mr. Christopher Wells and Ms. Kathy Sammons of the Southern States Energy Board. Mr. Wells informed committee members SSEB was renewing their cooperative agreement with DOE's Office of Nuclear Energy (DOE/NE) and there was some flexibility within the scope to perform specific tasks geared to the

interest of the region. He then proceeded to query the committee for input regarding pertinent matters they would like to see addressed in the new scope of work. Afterwards, Mr. Wells also spent a few moments soliciting ideas from the membership about plenary and breakout session topics for the 2016 National Transportation Stakeholders Forum. Next, Ms. Sammons (SSEB Director of Business Operations) addressed the committee. Ms. Sammons spoke directly to those states who have work plans with SSEB to maintain transportation programs in support of transuranic waste shipments from DOE generator sites in the southern region to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. Ms. Sammons alerted them regarding new policies for the submittal of their work plans and budgets and noted she would be available for one-on-one consultation to provide them with details regarding their current fiscal standing.

Mr. Mike Wangler with the U.S. Department of Energy/Environmental Management (EM) Office of Packaging and Transportation was the next to present at the meeting. He began by providing a broad program overview followed by the progress of EM cleanup activities of former nuclear weapons sites. He displayed a map illustrating how 107 historical sites had been reduced to only 16 today. Mr. Wangler indicated that half of EM's FY 2016 budget request (\$5.818 Billion) was committed to waste management activities. He provided another map geared to waste disposition activities at each site within the EM complex and then he spoke concerning some highlights of projects ongoing in or near the SSEB region such as Oak Ridge, Portsmouth/Paducah, Savannah River and even West Valley because of the likelihood of the vitrification melter shipment transversing several states in the south. He mentioned that low-level waste (LLW) and mixed low-level (MLLW) waste legacy inventories remain in small volumes, but that the waste stream continues because of active decontamination and decommissioning projects. He noted that the Department still supports commercial disposition options for very small amounts of this waste stream. Mr. Wangler discussed the latest news concerning Greater-than-Class C LLW Disposal noting evaluation and planning of additional on site disposal options was underway and that DOE continues to monitor Nuclear Regulatory Commission regulation changes which might impact this process. He directed the group to the Waste Information Management System as an additional resource for LLW/MLLW data. In the area of transportation, Mr. Wangler provided a pie chart detailing EM shipment numbers by category for FY15 and later compared those numbers with the previous 10 years. Next, he specifically addressed the following key program areas: Packaging Certification, Emergency Preparedness & Outreach, Regulations & Standards, Transportation Risk Reduction and Program & Site Support. He also talked about the transportation practices outlined in the new DOE Order 460.2B before concluding with a description of a radioactive materials packaging curriculum being offered by the University of Nevada, Reno.

Mr. James Mason, Institutional Affairs Manager, of the National TRU Program at the Carlsbad Field Office was the next presenter at the gathering. Mr. Mason provided background information for those attendees unfamiliar with the WIPP

site and the associated transportation campaign. He explained how the program consisted of coordination with the state regional groups and tribes, providing training, assisting with the purchase and maintenance of equipment, planning WIPPTREXs, and public outreach /educational activities. He also identified the WIPP RAP Team and the Incident/Accident Response Team as assets available to the states and tribes in the event of an accident involving a WIPP shipment. Next, Mr. Mason shifted his focus to discussing the recovery operations at the WIPP site post the February 2014 incident. He talked about the panel (6 and 7) room closures within the mine to isolate the waste drums that were the source of the release. He noted progress in restoration tasks such as catch-up bolting, soot cleaning, and radiological risk reduction thru water washing. He provided an update regarding the new permanent ventilation system and supporting exhaust shaft installations. Mr. Mason identified the availability of reports pertaining to the WIPP release incident and corrective actions plans being implemented to rectify issues associated with the event. He ended by informing the group upon the site's reopening, the main priority will be the underground emplacement of waste stored in the WIPP surface facilities at the time of the incident. Shipments from the regional sites will commence only after DOE considers applicable technical and programmatic factors.

Mr. Jamie Adam (NAC International) and Mr. Blake Williams (Secured Transportation Services) provided the committees with a brief update of their transportation activities in support of the Global Threat Reduction Initiative (GTRI). The GTRI is an international program under the auspices of the National Nuclear Security Administration which involves the retrieval of spent highly-enriched uranium fuel currently stored at Chalk River Laboratories in Ontario to be transported to the Savannah River Site in Aiken, South Carolina. They noted their organizations would continue to coordinate with the corridor states along the route for planning and emergency response purposes and that shipments will resume normal scheduling pending Commercial Vehicle Safety Alliance certification of Canadian transportation officers. They wrapped up their comments by committing to continue coordinating with the states to develop contingency plans for bad weather and avoidance of special events.

The next presenter was Mr. Randy Russell, Hazardous Materials Specialist with the Federal Motor Carrier Safety Administration (FMCSA). Mr. Russell began by describing the organizational structure of FMCSA and highlighted the recent changes in its leadership. He talked about the core principles of the organization which encompassed raising safety standards by removing high-risk/unsafe carries, drivers and vehicles from the highway. He described in detail the nature of FMCSA's top five priorities: Compliance, Safety, Accountability Phase III; Safety Fitness Determination; Electronic Logging Devices; Unified Registration System; and Inspection Modernization. He devoted the remainder of his time to hazardous materials program priorities focusing primarily on safety permit program improvements.

The Transportation Emergency Preparedness Program (TEPP) Review was delivered by Ken Keaton of TRG Incorporated. Mr. Keaton told the committees he would provide an overview of the training activities that have taken place to date and the activities scheduled for the near future. He displayed a chart with the FY 2015 training courses in the southern region (66 classes) as well as the number of students (1090) who participated in these activities. In the area of exercises he reported a total of four (3 WIPP/TEPP - GA and 1 Full-Scale - VA) events taking place in the south. Mr. Keaton noted (12) Technician Modular Emergency Response Radiological Transportation Training (TMERRTT) sessions and 40 MERRTT or Compressed MERRTT were scheduled in various states (GA, KY and VA) for FY2016. He also discussed the potential for a Radiation Specialist Session in Charlotte, North Carolina and central Kentucky based on available funding. Next, he talked about the MERRTT revision process being conducted by the DOE TEPP Working Group to improve the current version of the training modules. The Group is on path to complete the process by Summer 2016. He provided an update of the TEPP Improvement Projects including the continued incorporation of the National Fire Protection Association Standards as well as a collaboration with FEMA to develop an online computer based training program and other possibilities for offering radiological response training for responders. Lastly, Mr. Keaton gave the attendees a website address for TEPP resources.

The Nuclear Fuels Storage and Transportation (NFST) Planning Project Update was delivered by Ms. Erica Bickford (DOE Office of Nuclear Energy). Ms. Bickford began by showing the group an organizational chart of DOE and where her specific agency was situated within the framework. She then updated the group on the actions the Department will take to implement a consent-based siting process for both the defense and commercial spent fuel repositories. As reference material to the repository discussion, Ms. Bickford used a pie chart to show the projected SNF/HLW volumes that would be managed by DOE. She also provided an illustration of packages which could provide disposal options. Moving on to budget matters, she noted the Department requested \$30 million in their FY2016 request for an integrated waste management system. Ms. Bickford highlighted the major initiatives of the NFST program which included developing a National Transportation Plan, crafting the formula for the implementation of Section 180(c), creating a route planning tool and reporting on the status of shutdown sites. She briefly mentioned DOE's objectives for SNF storage in addition to strategic crosscut measures that support siting, storage and transportation initiatives. In regard to transportation, she emphasized continued engagement with the stakeholders (states and tribes), modification and improvement of the Stakeholder Tool to Assess Radioactive Transportation or START. Furthermore, she discussed the development of the ATLAS railcar which progressed in August 2015 as AREVA Federal Services signed a contract to design and fabricate a prototype. Next, she provided the group with a projected timeline of milestones for the railcars from the present until the anticipated completion date of 2022. In conclusion, Ms. Bickford listed the NFST reports available for distribution and identified the (Centralized Used Fuel Resource for Information

Exchange) CURIE as a mechanism for accessing the reports and other data related to the project.

Mr. Steve Maheras, Pacific Northwest National Laboratory, gave the final presentation of the meeting regarding the status of shutdown sites and the visit to the Crystal River Nuclear Power Plant for examination of the transportation infrastructure. Mr. Maheras began with an explanation of the shutdown sites report indicating it is a resource that list information such as site inventory, conditions and near-site transportation infrastructure. The report is for planning purposes and also helps to identify gaps or processes which must be resolved to transport fuel to an interim site and/or national repository. Next, he displayed a map showing the 13 shutdown sites that have been included in the report thus far. He talked about the sources used to gather the data for the report including documents, data bases, geographical information systems, physical site visits, experience from site managers and discussions with transportation companies involved with moving heavy equipment to and from the sites. He emphasized the visits also take into consideration the variety of staging equipment and the various modal aspects of conducting transportation. Mr. Maheras spent the remainder of his presentation talking specifically about the Crystal River site visit. He informed the group Crystal River had no spent fuel presently in dry storage, but plans to use the NUHOMS system for the establishment of their Independent Spent Fuel Storage Installation. Crystal River has multi-modal access, so Mr. Maheras showed several aerial maps to orient the audience to the location of specific infrastructure on the site. He also showed the committees how heavy equipment was moved in or out of the site by various modes. Mr. Maheras highlighted rail routes, quality of rail and rail safety equipment near the site. Furthermore, he showed multiple photographs of how barge and heavy haul operations are currently conducted on the site. Lastly, he thanked all the team members for actively participating in the site visits and providing contribution to the content of the overall report.

The remaining portion of the meeting consisted of a round table discussion to highlight the activities of all states in attendance. After all states had provided an update, Mr. Wells reported on the status of activities at SSEB.

The final order of business at the meeting was the announcement of the location and date of the next meeting of the Radioactive Materials Transportation Committee and the Transuranic Waste Transportation Working Group. Since the group continues to meet in conjunction with the NTSF for their Spring meeting, it was reported that they would gather again on June 7-9, 2106, in Orlando, Florida.

IF YOU WOULD LIKE TO RECEIVE A COPY OF THE PRESENTATION MATERIAL REFERENCED IN THIS SUMMARY, PLEASE ACCESS THEM VIA THE SSEB WEBSITE AT SSEB.ORG UNDER NEWS & EVENTS/PAST EVENTS. YOU MAY ALSO CONTACT MR. CHRISTOPHER WELLS BY PHONE AT (770) 242-7712 OR BY EMAIL AT WELLS@SSEB.ORG.