

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

Doubletree by Hilton Nashville Downtown
Nashville, Tennessee
December 6-7, 2017

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 6-7, 2017. The event was held at the Doubletree Hotel in Nashville, Tennessee.

Mr. Christopher Wells, Assistant Director of Nuclear Programs for the Southern States Energy Board, called the meeting to order. He formally welcomed the group and provided logistical and administrative meeting announcements. Following the comments, Mr. Wells turned the meeting over to Mr. Alan Jacobson (Maryland), Chair of the Radioactive Materials Transportation Committee, who issued opening remarks and commenced with the introduction of all meeting participants.

The first speakers of the event were Mr. Mel Massaro and Jeffery Moore of the Federal Railroad Administration (FRA). They began the presentation by providing an overview of Operation Lifesaver. The intention of the program is to use education, enforcement and engineering to reduce the likelihood of railroad grade crossing accidents. Operation Lifesaver state contact information was provided to the participants, who were encouraged to organize events and share the safety practices. Next, they addressed the FRA's State Rail Safety Participation Program. This program involves the training of state inspectors in one or more of the five rail safety inspection disciplines: Hazardous Materials, Motive Power and Equipment, Operating Practices, Signal and Train Control and Track. Overall, the program aids states in developing their own rail safety programs and maintaining a level of technical proficiency. Finally, they provided an overview of the FRA's Safety Compliance Oversight Plan (SCOP) for Rail Transportation of High-Level Radioactive Waste and Spent Nuclear Fuel. Although the SCOP is an FRA policy initiative and not an official regulatory mandate, it has been applied for many short-term rail shipping campaigns. The SCOP is currently under revision to include new disciplines such as bridge and structures safety, positive train control and rail integrity.

Next, the committee was presented to by Mr. David Pstrak of 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 budget, strategic plan, rulemaking, federal register notices, license applications for interim storage and Yucca Mountain. He began by listing the current commissioners and potential appointees for consideration to form a full Commission. Mr. Pstrak outlined the work to be performed by NRC and identified a timeline for accomplishing the tasks. He talked about several pertinent Federal Register notices such as the Consolidated Dry Storage Standard Review Plan and the Managing Aging Processes for Storage or MAPS, which resulted from NRC staff's need for expanded guidance regarding the renewal of licenses and certificates of compliance for the storage of spent nuclear fuel. Mr. Pstrak noted the Waste Control Specialists (WCS) license application was suspended by NRC in April 2017 and the Holtec International and Eddy-Lea Energy Alliance application is currently in acceptance review and subsequent supplemental information has been requested. As for the Yucca Mountain issue, he indicated the NRC is staffed and ready to support hearings if Congress appropriates the funds. Finally, Mr. Pstrak concluded his presentation by alerting committee members of the availability of two NRC publications: Safety of Spent Fuel Transportation and Safety of Spent Fuel Storage.

Christopher Wells, Southern States Energy Board, gave an overview of the 2018 Mississippi WIPPTREX on behalf of Mr. Anthony Walters (MS WIPP Program Manager) who could not be available for the meeting. Mr. Wells began by showing a map illustrating the WIPP counties in Mississippi along the Interstate 20 corridor. He noted all of the various agencies that would be participating in the exercise and discussed some of the objectives such as demonstrating adequate response coordination, implementing the Incident Command System and testing medical surge capabilities. The exercise will take place at the Mississippi Fire Academy in Peal, Mississippi on March 22 thru 24th utilizing the "rodeo format" where several shifts of responders are participants in the same scenario over three days. The accident scene involves a WIPP truck, a passenger car and a delivery truck carrying radioactive material. The design is intended to allow first responders to perform scene and injury assessment and to transport a patient to the hospital for decontamination measures. The exercise duration will be approximately four hours, after which the group will gather for a hotwash to discuss corrective actions and solicit general feedback.

Mr. Kai Kaletsch with Environmental Instruments Canada was next to address the committees. Environmental Instruments Canada has a product called Gamma Guard, which is a smartphone application that will convert a phone's camera into a radiation sensor. The aim of the product is to reduce the equipment load of first responders and allow them to conduct their job more effectively without the expectation of being a radiological health professional. The Gamma Guard system also has the capability of connecting to more sensitive and specialized detectors via Bluetooth. The product was tested by several rural

fire departments and was found to be a good indicator of detecting radiation and providing responders with readily available information to make quick decisions.

Mr. Richard Arnold representing both the Pahrump Paiute Tribe of Nevada and the Tribal Radioactive Materials Transportation Committee (TRMTC) talked to the audience regarding tribal perspectives on emergency response and radioactive materials transportation. Mr. Arnold showed a slide identifying the current (15) tribes who comprise the TRMTC membership and he talked about (6) additional tribes who had expressed interest for membership. He discussed TRMTC activities which took place in 2017 including collaborations with the NRC, FRA, Brotherhood of Engineers and Trainmen, and Shut-down site visits just to name a few. He noted TRMTC currently serves as co-host of the National Transportation Stakeholders Forum (NTSF), but is exploring the possibility of serving as the primary host. Furthermore, he gave an overview of the Nuclear Energy Tribal Working Group (NETWG) which was chartered by the Department of Energy (DOE) Office of Nuclear Energy in 2015 to focus on research and development, stakeholder outreach, business opportunities for Indian-owned businesses and many other activities. The next meeting of TRMTC and NETWG is scheduled to take place in Omaha, Nebraska in January 2018. Finally, he concluded by agreeing to continue working with SSEB and the other regional groups to bridge gaps in order to develop and foster relationships with tribes located in the various region.

Additional tribal perspectives were delivered by Lillie Lane, Senior Public Information Officer of the Navajo Nation Environmental Protection Agency (NNEPA). Ms. Lane began by explaining the relationship between the NNEPA and Regions 6 and 9 of the U.S. Environmental Protection Agency. She noted there is a Memorandum of Understanding between the agencies with regard to environmental protection authorities and ceding authority over Navajo lands within the state of New Mexico. NNEPA has its own set of environmental laws and regulations to establish air, land and water standards. The major initiative of the NNEPA is seeking remediation of over 500 abandoned uranium mines throughout the Navajo Nation. There have been settlement agreements to cleanup some of the mines, but approximately 390 of the mines have no responsible parties. Lastly, she mentioned the formation of the Uranium Commission comprising 12 Navajo tribal members who are entrusted with making decisions on cleanup options, disposal and other associated issues.

The final speaker of the first day of the meeting was Ms. Joanne Lorence of the DOE Environmental Management's Office of Packaging and Transportation who provided a short briefing about the National Transportation Stakeholders Forum (NTSF). Ms. Lorence 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. She noted the Council of State Governments-Midwestern Office was the host of the upcoming June 2018 Annual Meeting in Omaha, Nebraska.

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 the committee members of three information requests solicited by DOE's Office of Nuclear Energy (DOE/NE). He thanked them for their contribution to the first request that addressed historical input from the region on past privatization proposals associated with the commercial waste program. Mr. Wells also informed members he would need their assistance towards completing the other two tasks to include economic and social considerations for decommissioning nuclear power plants and a summary of legal frameworks by state for Class 7 Highway Route Controlled Quantity shipments applicable to spent nuclear fuel. Next, Ms. Sammons (SSEB Director of Business Operations) addressed the committee. Ms. Sammons spoke directly to those states that 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 informed them she would be available for one-on-one consultation to provide them with details regarding their current financial standing. Lastly, she told committee members to be expeditious in returning their expense reports because the SSEB office would be closing soon for the holidays.

Ms. Joanne Lorence with the U.S. Department of Energy/Environmental Management (EM) Office of Packaging and Transportation was the next to present at the meeting. She began by providing a broad program overview followed by the progress of EM cleanup activities of former nuclear weapons sites. Ms. Lorence indicated that over a third (37%) of EM's FY 2018 budget request (\$6.508 Billion) was committed to radioactive tank waste issues. She displayed a map illustrating how 107 historical sites had been reduced to only 16 today. The reduction represents a 90% decrease in the EM footprint. She provided slides geared to waste disposition activities at three sites within the EM complex located in the SSEB region: Oak Ridge, Savannah River and Portsmouth/Paducah. She mentioned that low-level waste (LLW) and mixed low-level (MLLW) waste streams continue because of active decontamination and decommissioning projects. In fact, LLW made up the majority (72%) of EM shipments for FY 2017. She noted that the Department still supports commercial disposition options (EnergySolutions and Waste Control Specialists) for very small amounts of these waste streams. Ms. Lorence displayed an EM organizational chart and identified where the Office of Packaging and Transportation stood within the management structure. Next, she specifically addressed the following key program areas: Packaging Certification, Emergency Preparedness & Outreach, Regulations & Standards, Transportation Risk Reduction and Program & Site Support. She also talked about the transportation practices outlined in DOE Orders 460.1D (Packaging and Transportation Safety), 460.2B (Departmental Materials Transportation and Packaging Management) and 460.3 (Security and Physical Protection during Transport). In conclusion, Ms. Lorence gave a quick overview of the Transportation Emergency Preparedness Program (TEPP). She also mentioned the emergence of a

transportation shipping assessment program giving her office the authority to audit Type B or fissile packaging and transportation operations and quality assurance programs to ensure compliance with regulations.

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 began by illustrating shipment activities since recovery efforts and the reopening of the WIPP site and renewal of the associated transportation campaign. He noted emplacement rates are 5-6 shipments per week with the goal to continue ramping-up in FY2018. He displayed a slide with projected shipment numbers for sites in the SSEB region that included Savannah River Site (10), Waste Control Specialists (18) and Oak Ridge National Laboratory (40). Total shipment projections of TRU waste from all sites in FY2019 totaled 258. Since the site reopened, Mr. Mason noted several milestones had been achieved such as 100 shipments post operations resumption and 12,000 shipments for the life of the program. Finally, Mr. Mason discussed several interrelated technical and programmatic factors (budget, maintenance of waste handling systems, bolting operations, contamination procedures, DOT shipping limits and other regulations, security, etc.), which would undoubtedly impact the overall emplacement schedule at WIPP.

Mr. Steven Stone representing the Oak Ridge Office of Environmental Management (OREM) addressed the committees regarding ongoing activities at the site. He proceeded to give an overview of the activities being performed at the Y-12 facility, Oak Ridge National Laboratory and the East Tennessee Technology Park. He talked about shipping activities undertaken by the three main contractors. URS|CH2M Oak Ridge ships Type A and industrial packages mainly consisting of decontamination and demolition work. NorthWind Solutions handles some of the TRU shipments and conducts a small amount of special packaging LLW shipments to the Nevada National Security Site (NNSS). Isotek also conducts some LLW shipments to NNSS, but also took part in Type B campaigns such as the Consolidated Edison Uranium Solidification Program. Lastly, he noted the Transuranic Waste Processing Center at ORNL had completed 14 shipments to WIPP for the calendar year with the first initiating in August 2017. Due to the accomplishments of OREM, a footprint encompassing 4.5 million square feet of materials has been demolished and removed offsite.

Mr. Nicholas Laning, Program Analyst for Chainbridge Technologies gave a presentation on RadResponder. RadResponder is a systematic approach for the management of radiological data and is provided free of charge to all Federal, state, local, tribal, and territorial response organizations. It involves collaboration between the Federal Emergency Management Agency, DOE-National Nuclear Security Administration and the Environmental Protection Agency. He informed the committees of RadResponder's emergency response network application that allows organizations to share and aggregate radiological data during an incident via multiple platforms.

Finally, Mr. Mike McGarey of the Nuclear Energy Institute gave a short impromptu overview of impending legislation for the management and disposal of spent nuclear fuel and high-level radioactive waste.

The committees also received a briefing from Ms. Terry Soulsby, Global Logistics Manager of Nordion. Nordion is a health science company based in Canada that provides mission-critical radioisotopes used for the prevention, diagnosis and treatment of disease. Due to the nature of their mission, the company ships Cobalt 60 (Co-60) and medical isotopes all over the world including many locations in the United States. Historically, Nordion has been involved in the transportation of Co-60 for more than 50 years. Since the Co-60 is considered a Class 7 cargo, Nordion has worked closely with all of its stakeholders (including the states of the SSEB region) to remain compliant in the regulatory arena. She expressed one of the most difficult situations is identifying ocean carriers and ports who will accept Class 7 cargo. She provided slides showing the licensed containers used to transport the Co-60 and examples of the Type A and B packaging utilized for shipments of medical isotopes. Ms. Soulsby concluded by giving a snapshot of Nordion's satellite shipment capabilities for monitoring ocean and highway transit of their movements.

The Transportation Emergency Preparedness Program (TEPP) Review delivered by Ken Keaton of TRG Incorporated was the final presentation of the meeting. Mr. Keaton told the committees he would provide an overview of the training taken place to date, activities scheduled for the near future, training program revisions, improvement projects and available website resources. He provided the committee with a chart of the FY 2017 training courses in the southern region (68 classes) as well as the number of students (992) who participated in these activities. He briefly spoke about the (2) full-scale live source exercises that took place in Morgantown, West Virginia in July 2017. Mr. Keaton noted (35) Modular Emergency Response Radiological Transportation Training (MERRTT) and Compressed MERRTT classes were scheduled throughout the southern region for FY 2108 based on available funding as well as (19) Technician Modular Emergency Response Radiological Transportation Training (TMERRTT) sessions in various states (KY, MS, NC, VA and WV). He noted the possibility of another Radiation Specialist Course in Virginia, in addition to the November/December offering recently completed in MS, somewhere in the May 2018 range again pending the availability of funding. He also mentioned tentative plans to support three consecutive live radiation source exercises in September 2018 in Winchester, Kentucky. Next, he talked about completing the MERRTT revision process and how DVDs were produced in May. He distributed a few of the new MERRTT modules in the newly developed flash drive card format and noted attendees could contact Mr. Wells to obtain copies. He provided an update of the TEPP Improvement Projects including continued agency cooperation with the National Fire Protection Association regarding hazardous materials/weapons of mass destruction applicable standards and practices in addition to working with the Federal Emergency Management Agency (FEMA) Center for Domestic Preparedness to explore the possibility of offering MERRTT as a part of FEMA's

Radiological Instructor Series and participating with the agency in a computer based training development course. Lastly, Mr. Keaton gave the attendees a website address for TEPP resources.

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. Before adjourning, the committees proceeded with the election of new officers. The Radioactive Materials Transportation Committee will be chaired by Mr. Alan Jacobson (MD) and vice chaired by Mr. Roger Thompson (TN). The Transuranic Waste Transportation Working Group elected Ms. Denise Brooks (TX) as chair and Mr. Mark Wyland (GA) as vice chair.

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 4-7, 2018, in Omaha, Nebraska.

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