

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

Hotel Phillips
Kansas City, Missouri
December 9-10, 2025

Meeting Summary

The Southern States Energy Board's (SSEB) Joint Meeting of the Radioactive Materials Transportation Committee and the Transuranic Waste Transportation Working Group was held on December 9-10, 2025. The conference was hosted at the Hotel Phillips in Kansas City, Missouri.

Mr. Christopher Wells, Director of Nuclear Programs for the Southern States Energy Board (SSEB), called the meeting to order. He greeted the attendees, acknowledged his fellow staff, provided logistical remarks and made a few administrative announcements. Following the brief comments, Mr. Wells turned over moderation duties for the first day to Mr. David Johnson (Tennessee), Chair of the Radioactive Materials Transportation Committee who initiated the general introduction of all meeting participants.

The Transportation Emergency Preparedness Program (TEPP) Review was provided by Dan Mills of TRG Incorporated. He told the Committees he would provide an overview of the TEPP mission, training taken place to date, activities scheduled for the near future, training program revisions, improvement projects and available website resources. He provided data for completed training sessions and accredited participants nationally before displaying a chart with the FY 2025 training courses in the southern region by individual state. He also provided an estimate of the FY 2026 courses planned to be delivered to SSEB member states pending available funding. He highlighted partnerships with WIPP to co-teach MERRTT as well as with the Office of Secure Transport (OST) to increase the visibility of their agents and have them assist with training on the OST classified shipment module. He provided an update of the TEPP Improvement Projects including a hospital emergency department course, medical examiner/coroner course and the filming of a Law Enforcement Decontamination Video in Georgia. Mr. Mills gave the attendees a website address for TEPP resources with specific reference to the online MERRTT

refresher. Lastly, he noted a real-world incident where fire fighters used MERRTT knowledge and principles during their response.

The next speakers were Ms. Celeste Cusack, DOE TEPP Contractor, and Mr. Forrest Weston, Texas Department of State Health Services. The topic of the duo's presentation pertained to Texas officials working with TEPP to facilitate training, drills and exercises in the state. They began by showing a map with DOE shipping routes and the types of radioactive materials which transit Texas. There was discussion about MERRTT training in locales along the DOE shipping routes in anticipation of an August 2025 tabletop exercise in Stanton, Texas called "Dirty Dirt". The exercise scenario involved low-level waste being transported to Waste Control Specialist and included the participation of numerous emergency management agencies as well as the local hospital. Utilizing the same methodologies, the TEPP contractors and Texas personnel organized another tabletop exercise in October 2025 in Amarillo, Texas. Both of the tabletops led to the conduction of full-scale exercises which allowed participants to gain hands on experience. Additionally, the full-scale events used a modified rodeo style format which permitted a large number of first responders to take part in the training.

The third presenter to brief the SSEB Committees was Ms. Sara Hogan of DOE's Office of Nuclear Energy's (DOE-NE) Office of Storage and Transportation. Ms. Hogan displayed a DOE organizational chart with her office's placement. Next, she produced a diagram indicating how spent fuel from commercial plants and DOE sites would be logistically dispositioned in a repository. She highlighted major activities for her office including activities related to a federal consolidated interim storage facility, the high burnup research cask (HBURC) project and the Center for Applied Research in Storage and Transportation. She displayed, for the attendees, the FY2026 draft authorizing language providing the congressional budget marks for the Used Nuclear Fuel Disposition R&D and the Integrated Waste Management Systems. Ms. Hogan noted the Department's attention to key acquisitions such as impact limiters and cradle fabrication as well as the procurement of additional Atlas railcars. Next, she gave a brief overview of DOE-NE/NTSF Ad Hoc Working Groups including Section 180(c) and the HBURC Shipment. Additionally, Ms. Hogan referenced the winter (March) and fall (August) meeting of the Transportation Core Group as another major avenue of state and tribal engagement. She turned her focus to FY2026 priorities which included preliminary planning activities in association with the consolidated interim storage facility, fabrication of hardware and preparation for the HBURC shipment. Ms. Hogan discussed the ongoing efforts of the Office of Disposal Research towards site characterization and geology studies as well as the

collaboration-based siting program. Lastly, she talked about university shipments of spent nuclear fuel around the country and their transit to either Savannah River Site or Idaho National Laboratory.

Ms. Hogan continued addressing the Committees along with the addition of her colleague, Miriam Juckett of Pacific Northwest National Laboratory regarding the HBURC Shipment. Ms. Juckett began the presentation with an overview of the High Burnup project. She described the nature of the endeavor as a comprehensive study to examine the characteristics of high burnup spent nuclear fuel in storage and during transportation. After detailing the specifications of the cask and the fuel, she noted the data from the project would be invaluable to building public trust as it could be many decades before a U.S. repository is operational. Finally, she displayed a slide of the Atlas Railcar and Rail Escort Vehicle being used for the Spring 2027 demonstration run and detailing how DOE will work with states and tribes to enact protocols for safe shipping practices before the actual transport takes place in Fall 2027. The duo displayed a list of activities to be achieved from 2024 until 2027 for the shipment including procuring equipment, developing plans, coordinating with other federal agencies and the rail carriers and working with the states and tribes to provide training and technical assistance. Lastly, they urged the participants to provide input on the project via the HBURC Shipment Ad Hoc Working Group.

Ms. Juckett switched topics and continued to brief the Committees on the Idaho National Laboratory (INL) Infrastructure Evaluation for the HBURC Shipment. She explained the site evaluation is a three-day process: Day 1 – Rail Infrastructure; Day 2 – Site Examination; and Day 3- Local Leaders Meeting. The most recent visit to INL took place on August 11-15th. She showed the attendees a map of INL as well as aerial, GPS and photographed images of the rail, railyard, bridges, junction points and interchanges, potential transload areas, cask pad at INL and receipt facilities at INL. She talked about all of the involved parties who participated in the visit including DOE personnel and other federal agencies, Shoshone-Bannock Tribe, various Idaho state agencies, ORANO, Union Pacific and the tribal and state regional cooperative agreement groups. In conclusion, she stated the importance of information sharing (briefings/visual aids/fact sheets/discussion) during the local leaders meeting which included a good turnout of approximately 40 attendees representing tribal leadership and state, local and federal representative from Idaho.

Next, Mr. James Mason (Institutional Affairs Program Manager) at the Carlsbad Field Office and Mr. Bobby St. John (External Communications Manager) of Salado Isolation Mining Contractors provided the Waste Isolation Pilot Plant

(WIPP) update. Mr. Mason began by informing the group the WIPP facility is almost half-way to capacity housing 2.7M cubic feet of TRU Waste. WIPP has received 432 shipments during FY2025 and 14,671 since its opening in 1999 and has exceeded 17 million safe loaded miles of transport. Currently, the facility's receipt rate is approximately 10-12 shipments per week. He described detailed mining activities underway to meet the disposal volume requirements identified in the WIPP Land Withdrawal Act. Additionally, he noted Panel 8 is steadily receiving capacity as Rooms 7 thru 4 are full and waste is being received in Room 3. Routine mining maintenance continues on the western panels. Mr. St. John happily reported on the completion of the most significant capital projects, the Underground Ventilation System, and the Utility Shaft. These two endeavors will greatly improve the reliability of air flow and increase worker safety in the underground.

The next portion of the meeting consisted of a cooperative agreement program update to highlight the activities of the state regional groups and the Tribal Radioactive Materials Transportation Committee.

The final matter for the first day of the conference was the hybrid meeting of DOE's HBURC Ad Hoc Working Group. Working Group attendees who were present gathered and were joined by their colleagues online to discuss issues related to the future HBURC shipment. Non-Working Group members were welcomed to observe the proceedings.

Mr. Christopher Wells (SSEB) initiated the second day of the meeting with a brief administrative business session. He reminded committee members to be expeditious in submitting their expense reports before the SSEB office closes for the holidays. Following these remarks, Mr. Wells introduced Mr. Mark Wyland of Georgia who was serving as Chairman of the Transuranic Waste Transportation Working Group. Mr. Wyland formally facilitated the final day of the meeting by initiating the introduction of all presenters as identified on the program agenda.

Mr. Jasper Gilardi and Ms. Madeline MacDevette (Envoy Public Labs) provided an update on some of their projects involving stakeholder engagement pertaining to nuclear issues. DOE-sponsored initiatives such as the Gateway for Accelerated Innovation in Nuclear and their Collaboration-Based Siting approach will ultimately involve the siting of facilities and therefore require the support of state and local communities. Envoy focuses on being a resource to the stakeholders and providing them with access to data regarding impactful issues. By seeking to understand the values of the community, working with state and local leaders

and leading workshops, they provide stakeholders with valuable information to make informed decisions. They are also currently working with the State of Utah on a large-scale public engagement campaign to provide education and resources, building from the grassroots level to the residents of the state as they explore nuclear project opportunities.

Deep Fission, utilizing a novel approach to entering the small modular reactor (SMR) market, was the next to address SSEB's Radioactive Materials Transportation Committees. Mr. Mike Brasel, Chief Operating Officer, informed the audience Deep Fission employs three established technologies in their Gravity Nuclear Reactor design: pressurized water reactors; geothermal technology; and deep borehole drilling. He stated Deep Fission was selected by DOE as one of a few companies for the Nuclear Reactor Pilot Program. Mr. Brasel indicated his organization has a plan and path to achieve criticality by July 4, 2026, because unlike many competitors; they use proven design and methodologies in their SMR addressing containment, cooling and the elimination of a large footprint for infrastructure.

Mr. Jeffrey Moore, Federal Railroad Administration (FRA), gave the next update. He noted the agency's focus on the field inspection of railroads, shipper locations and physical transload sites. Additionally, in 2026 there will be a review of all Class 1 Railroads' Department of Transportation Security Plan. He touched on upcoming railroad buyouts and mergers and FRA's use of institutional knowledge to address future concerns. Mr. Moore also talked about a route analysis data project along spent nuclear fuel rail routes focusing on defect conditions across operating disciplines. Finally, he addressed HM-263 of the Fixing America's Surface Transportation (FAST) Act. HM-263 is a final rule that requires railroads to provide real-time information about hazardous materials on their trains. The train crew is responsible for carrying out this mandate in the form of a physical paper document as a redundant backup to the electronic train consist. He noted the major change of the rulemaking was railroads must provide the electronic train consist information to authorized Federal, State and local first responders, emergency response officials, and law enforcement personnel along the train route who could be involved in a response scenario. The Class 1 Railroads have petitioned for a one-year extension to develop their approach for conveying the consist information.

Mr Steve Maheras (PNNL), via remote access, delivered the final formal presentation. His topic of discussion was "Microreactor Risk-Informed Transportation Package Approval Methodology". He began with a definition of microreactors and their key attributes as well as the various types proposed for

development. He addressed the maritime aspect by indicating many applications for the microreactors would be outside of the continental United States and thus they would have to be transported as cargo. He discussed proposed risk evaluation guidelines such as those developed by the Nuclear Regulatory Commission and DOE for licensing nuclear facilities. He provided an illustrated approach for the identification of shipment hazards. He continued thru 10 steps concluding with assessing the adequacy of safety margins. Mr. Maheras stated PNNL is currently conducting a scoping study to demonstrate the viability of a risk-informed approach for transportation package approval for maritime transport of a microreactor. He outlined the mandates of the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code). The INF Code established three classes of ships for transport. He concluded by listing various reports and studies being conducted by the Department of Defense to identify the legal and regulatory gaps to scalability.

The next portion of the meeting consisted of a round table discussion to highlight the activities of all states in attendance. After all participants 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 22-25, 2026, during the Annual Meeting in Austin, Texas.