

Midwestern Radioactive Materials Transportation Committee (MRMTC) Spring 2022 Meeting Summary

Philadelphia, Pennsylvania
June 7, 2022

AGENDA ITEMS

1. Committee Business Session

- a. Welcome and Introductions: Midwestern Radioactive Materials Transportation Committee (MRMTC) Co-Chair Mike Snee (Ohio) opened the MRMTC Spring 2022 Meeting by announcing that committee staffers Mitch Arvidson (Council of State Governments (CSG) Midwest) and Kathy Treland (CSG Midwest) were passing around a sign-in sheet for attendees to fill out. He also used this time to confirm that those on the Zoom call could hear him and that attendees in Philadelphia could hear the virtual attendees. Mr. Snee then gave a Tribal Nation and Land Acknowledgement as follows:

“This meeting is taking place on the traditional unceded homelands of the Lenape peoples. They refer to Philadelphia and the surrounding area as Lenapehoking. Forced migrations, broken treaties, and fraudulent agreements like the Walking Purchase of 1737 forced many Lenape away from this land. Lenape people continue to live here today and include the federally recognized Nation communities of the Delaware Tribe, Delaware Nation, and Stockbridge-Munsee Community. We recognize Philadelphia’s indigenous communities with many who live here now, those who were forcibly removed from their homelands, and the ancestors of this land. In offering this land acknowledgement, we affirm indigenous sovereignty and the cultural history of the indigenous people of this land in the City of Philadelphia.”

Mr. Snee then called the meeting to order and welcomed everyone to the MRMTC Spring 2022 Meeting, the first to be held in conjunction with the Annual Meeting of the National Transportation Stakeholders Forum (NTSF) since 2019. He invited all committee members to introduce themselves, which they did. He acknowledged and welcomed the committee’s newest member, Tad Rumas (Ohio). Mr. Snee encouraged committee members to think about project ideas for the next year, which would be discussed later. He reminded members that there was a very full agenda for the day and that remarks during the Regional Roundtable should be limited to 1) anything directly related to transportation and 2) developments related to the actual or possible shutdown of nuclear power plants. Finally, Mr. Snee noted that this was his second meeting as senior co-chair and Rodney Pitchford’s (Illinois) first as junior co-chair.

- b. Report from the Co-Chairs: This is an opportunity for the Co-Chairs to reflect on the status of the committee and interesting projects. Mr. Snee commented on the resumption of in-person trainings, meetings, exercises, etc. and encouraged members to seek out these travel opportunities, which CSG Midwest can provide reimbursement for. He also noted the Regional Tribal Engagement Work Group being a highlight of the committee’s work and could serve as a model for other regions. Finally, he discussed the Midwest’s hosting of the next U.S. Department of Energy Office of Nuclear Energy (DOE-NE) Transportation Core Group Meeting in Cincinnati in August. Mr. Pitchford focused his comments on the Midwest’s hosting of the next NTSF Meeting in May 2023, DOE-NE’s Consent-Based Siting Initiative and the committee’s work with that, and the committee’s strong representation on NTSF ad hoc working groups (AHWG).
- c. Project Update: Mr. Arvidson provided the Project Update.
- i) Status of the Cooperative Agreement: CSG Midwest’s request for a new 5-year cooperative agreement with the DOE was approved and will be effective January 1, 2022, through September 30, 2026. The previous 12-month, no-cost extension from the previous agreement will carry CSG Midwest through to January 1, 2022. CSG Midwest submitted a no-cost extension on its current cooperative agreement with the DOE Carlsbad Field Office (CBFO), which extends the current agreement through June 30, 2023. There is enough funding in the current agreements to sustain

the project until the next financial year due to the restrictions imposed by COVID melioration efforts. CSG Midwest will begin working with the DOE Office of Environmental Management (EM) to secure funding for the Midwest to host the 2023 Annual Meeting of the NTSF.

- ii) **Midwestern Radioactive Materials Transportation Project (MRMTP) Staffing:** Mr. Arvidson remains the sole staffer of the program. Kathy Treland provides administrative support to the project. CSG Midwest will hire a policy analyst to assist Mr. Arvidson.
- iii) **Cooperative Agreement Tasks**
 - o **Regional Committee**
 1. Appointments / Departures: Tad Rumas of the Public Utilities Commission of Ohio was designated as the state's official alternate. Paul Gazdik departed Wisconsin Emergency Management and MRMTC awaits his replacement.
 2. NTSF Planning Committee: Misters Snee, Pitchford, and James Rashilla (Nebraska) are the Midwest states' representatives on the Planning Committee along with Mr. Arvidson as staff representative. The 2022 Annual Meeting has been the focus of the Committee's work. The Northeast High-Level Radioactive Waste Transportation Task Force is hosting the meeting in Philadelphia, PA. CSG Midwest assisted CSG East with agenda planning. The Committee has also commenced preliminary planning for the 2023 Annual Meeting of the NTSF, which will be hosted to the MRMTC. Ellen Edge (DOE-EM) leads the Planning Committee for DOE.
 3. Webinars: CSG Midwest has not hosted any NTSF webinars since the last committee meeting.
 4. Website: CSG Midwest hosts the NTSF website, and Mr. Arvidson, Erika Bickford (DOE-NE), and Ms. Edge populate and maintain the site. AHWG leads and Annual Meeting hosts are expected to maintain their portions of the website.
 5. Integrated Waste Management (IWM) Program: The Transportation Core Group (TCG) will present the states and Tribes with an opportunity to learn about the status of DOE-NE projects and programs. Additionally, they are charged with bringing questions to the project staffers. The MRMTC is hosting the next meeting of DOE-NE's TCG on August 30-31 in Cincinnati, OH.
 - o **Transportation Planning**
 1. Office of Packaging and Transportation (DOE-OPT): The DOE-OPT's Prospective Shipment Reports (PSR) provides planning information on long-term shipping campaigns and other high-visibility / hazardous materials shipments designated by DOE. The recent bi-annual edition listed a campaign that will travel through the Midwest consisting of approximately 25 truck shipments of tritium systems equipment and debris. The shipment will travel from Princeton, NJ to Nevada National Security Site (NNSS). There will be two shipments every month through July 2022 for this campaign.
 2. Waste Isolation Pilot Plant (WIPP): DOE-CBFO indicated that up to 3 shipments of transuranic (TRU) waste from Argonne National Laboratory (ANL) in Illinois to WIPP in New Mexico are scheduled between February 2022 and January 2023. This was published in the February semi-annual notification. Per the WIPP Eight Week Rolling Schedule Shipment Summary, none have yet shipped. CSG Midwest has extended its sub agreements with Illinois and Iowa to receive DOE funding to plan and prepare for WIPP shipments.

- **Information and Communication**
 1. Legislative Tracker: The 2021-2022 legislative tracker on state and federal nuclear energy and radioactive waste legislation is not yet complete. This task will be delegated to the new policy analyst upon his/her hire. In the interim, members are asked to notify Mr. Arvidson if they learn of legislation that should be tracked.
 2. Transportation Project E-newsletters: Monthly e-newsletters are distributed on the first Thursday of each month. Members or readers with news are encouraged to contact Mr. Arvidson.
 3. Committee Website: Suggestions for improvements to the CSG Midwest-maintained webpages should be directed to Mr. Arvidson.
- d. Committee Work Group Reports and Discussion: Mr. Snee announced that the MRMTC has had two active work groups since the last committee meeting and we would be hearing report outs now.
 - i) Regional Tribal Engagement Work Group: Sarah Chaney (Indiana) gave the report on this work group. Since last December, the work group had met via Zoom twice, on January 4 and April 26. Like the NTSF, the Regional Tribal Engagement Work Group had a wiki site to share past agendas, past meeting summaries, work group products, and other items of interest. When the NTSF transitioned to a new Google site because of poor customer support from the wiki platform, the work group transitioned to a new Google site as well. The January 4 meeting consisted of reviewing the new site and hearing updates from work group members. The Work Group has also asked MRMTC members to determine if their agencies or states have tribal liaisons. Several states have responded, and the Work Group is maintaining a small index of tribal liaisons that can be shared with attendees at their request. When the Regional Tribal Engagement Work Group created its first work plan, a long-term goal was to conduct or help coordinate transportation-related trainings and exercises specifically for regional Tribes. Michigan seems like a good candidate for our first attempt because of the Big Rock Point independent spent fuel storage installation (ISFSI) and the recently shut down Palisades nuclear plant. Several Tribes are located near these sites, including the Little Traverse Bay Bands of Odawa and the Pokagon Band of Potawatomi. Spent nuclear fuel (SNF) shipments will eventually take place through or near these lands. The Work Group has begun working with the Michigan State Police who can offer specialized courses through their Hazardous Materials Training Unit. The group is also seeking advice from the Tribal Radioactive Materials Transportation Committee (TRMTC). It was not yet known when a training might be available but hopefully there will be more news soon.
 - ii) Consent Based Siting Request for Information (RFI) Ad Hoc Working Group (AHWG): Kelly Horn (Illinois) gave the report on this AHWG. This AHWG held three meetings and completed its work in the months following the MRMTC Fall 2021 Meeting. The group met via Zoom on January 12, February 10, and February 25. The purpose of the AHWG was to develop and submit responses to DOE-NE's Request for Information (RFI) on Using a Consent-Based Siting Process to Identify Federal Interim Storage Facilities. The group determined how the MRMTC response should be formatted, which questions would be answered, collaboratively drafted and edited responses, and shared the final draft with the entire MRMTC for review. The AHWG and the MRMTC submitted its final response on March 4. This response can be found [here](#). In general, the responses strived to promote and encourage DOE's participation in, and funding of, state regional groups like the MRMTC, tribal groups like TRMTC, and national organizations like the NTSF. Additionally, the responses stressed the importance of consultation and communication about radioactive materials shipments with state governments. State governments are co-regulators of these shipments, and they are responsible for the health and safety of their constituents. While consultation and communication are important and recommended, the RFI responses also say that consent is neither required, nor should be sought, for radioactive materials shipping campaigns.

e. National Transportation Stakeholders Forum (NTSF) AHWG Reports: Mr. Snee noted that these AHWGs had been dormant for a while or were just getting started. Most had their first meetings just a few hours ago. He explained that the committee was not looking for any in-depth reports but was requesting brief updates on what the groups discussed that morning.

i) Spent Nuclear Fuel (SNF) Rail/ Routing: Waylon Sanford (Michigan) gave the report on this AHWG.

Mr. Sanford indicated that this was the first meeting since 2019. The meeting was productive. During the meeting, Jeff Moore (Federal Railroad Administration (FRA)) reported on the Safety Compliance and Coordination Oversight Plan (SCCOP) from the FRA. Steve Maheras engaged the group in a long discussion on the railcar safety inspection protocol document. This document compares rail car inspections with Commercial Vehicle Safety Alliance (CVSA) Level VI truck inspections. It was decided that Level VI truck inspections bear similarity to necessary rail inspections, and it was determined that these truck inspections were well received by states as a model for rail inspections. An additional topic included tribal inclusion for FRA inspection observations and travel concerns address in DOE protocol documents. The group has launched a new website at ntsf.info, which replaces the previous wiki site.

ii) Spent Fuel Transportation Materials: Sarah Chaney (Indiana) clarified that part of the meeting was spent discussing Consent-Based Siting (CBS) and the public relations/affairs regarding that issue. This portion of the meeting was led by Juan Uribe (DOE-NE) and was attended by several different states and tribal community members. The meeting commenced with introductions, and it was noted that more people were in attendance than only committee members. The website would be updated to a google page that will announce meetings, house meeting minutes, and list projects moving forward with the ad hoc working group. Mr. Uribe offered some statistics on CBS information. The subsequent discussion addressed the work plan and the schedule for future meetings. It was noted that not all states will be able to attend all future in-person meetings, but it was decided that the meeting would go forward if a majority is in attendance.

A large portion of the meeting focused on communication tools. The Federal Registry Notice and DOE website were heavily criticized. The primary point held by many states is that the DOE had failed in their public relations (PR) addressing state radiation control programs, first responders, and the public. The DOE is exploring a three-tiered system to provide PR to those stakeholders in future. The state opinion urges the federal agency to be more trustworthy and execute federal responsibilities with alacrity and transparency without requiring state and local officials to do work properly within the purview of federal employees. The DOE is urged to improve relationships with local stakeholders. It was also pointed out that Tribes will have specific and unique needs that must be addressed. These needs include a substantial rural community that will require different and more effective methods of communication and training.

iii) Transportation Emergency Preparedness Program (TEPP) Training: Mr. Rumas gave his report on this AHWG. Mr. Rumas indicated that Mark Linsley (Technical Resources Group (TRG) Inc.) will provide further updates later in the meeting, so his initial report would be relatively brief and he began with a plug for the TEPP course in Ohio. First, some of the training modules within TEPP have merged to allow for more time in the hands-on, activity portion of the training, which will better approximate real-life training and scenarios. There had also been an introduction and improvement to the Rail Module, which included how to effectively respond in a rail environment. Speaker noted that the uptick in decommissioning is very likely to increase the applicability of the rail environment knowledge and emphasized the importance of this module. Additionally, an online Modular Emergency Response Radiological Transportation Training (MERRTT) course had been introduced. Whilst the limitations of online teaching of a science-based course were acknowledged, speaker indicated that this course was a success. Finally, speaker discussed the creation of a “flat sheet” – rather like a quick fact sheet that can be referenced in real time and as needed. There is a “flat sheet” currently available for law

enforcement and that a similar document is in draft format for hospital care and patient movement.

- iv) Section 180(c): Swapan Saha (Kansas) gave the report on this AHWG. Speaker stated that the morning's meeting had mostly been a review of previous Section 180(c) activities to get the new members up to speed. The Nuclear Waste Policy Act (NWPA) assigns DOE the responsibility to site, build, and operate a deep geologic repository for the disposal of high-level radioactive waste (HLW) and SNF. Amended in 1987, Section 180(c) was added to address financial support to states and Tribes ahead of DOE shipments. Between 1988 and 2017, various DOE offices and stakeholder groups worked towards the design of a policy and grant program that would meet the requirements of Section 180(c). DOE-NE was eventually assigned the responsibility for continuing planning and analysis and was relaunching the NTSF Section 180(c) AHWG this year. A 2008 Federal Register Notice (FRN) began addressing the following aspects of Section 180(c); funding mechanism, basis of cost estimates/grant funding allocation to states and Tribes, allocation method for the variable portion of states' and Tribes' annual training grants, eligibility and timing of the grants, allowable activities, and merit review criteria. The 2012 – 17 version of this AHWG revisited prior issues papers and the 2008 FRN with no changes to state fees, pass-through funds, contingency re-routing, matching funds, and funding operation activities. However, there were revisions regarding timeline and eligibility, allowable activities, definitions, rulemaking, and funding distributions methods. In 2014, a Proposed Policy Implementation Exercise took place to test the operability of the proposed funding application process and to enhance stakeholders' understanding. This exercise identified the following issues; rural vs. urban funding allocation, understanding training needs, the need for guidance on how to apply for grants, whether eligibility would be noncompetitive, composition of merit review panels, whether operational costs could be included, etc. Now, the near-term tasks for the reformed AHWG are to develop a grant application guidance document, develop a fact sheet, further analyze the grant allocation formula, and develop TEPP training modules for SNF shipments. Long-term, the AHWG will strive to develop a media plan for SNF shipments, develop a timeline of milestones for a SNF transportation system, develop a training and public outreach schedule, conduct a Section 180(c) Pilot program with actual funding, and conduct informational webinars. Mr. Saha's presentation can be found [here](#).

f. Other Meetings Attended

- i) Waste Management Symposium 2022: Mr. Horn was invited by Mr. Arvidson to be a panelist at the Waste Management conference in Phoenix, AZ, where at least 6 other panelists were present. Mr. Horn indicated that his presentation covered some of the activities in which the state of Illinois engaged during the past year through the MRMTC. Speaker discussed best practices for engaging with shippers ahead of time, stakeholder input into transportation plans, and work being done by Mr. Pitchford's group on rail shipments from Vermont Yankee and the decision made by Illinois to treat those shipments as U.S. Nuclear Regulatory Commission (NRC) category 1 and 2 waste so to test procedures and processes, and to identify any shortcomings within those procedures and processes. Speaker believed that his presentation was well received and will lead to Mr. Pitchford's return for further discussion with Waste Management. Additionally, speaker discussed Illinois' response to the rail car fire at Bedford Park and the lessons learned from that event. He believed there was significant engagement from attendees, and he acknowledged that the question of communication with the public brought up elsewhere remains paramount. Speaker indicated that the question of how to craft the narrative that spent nuclear fuel shipments are safe and secure, as well as the role states play in that messaging and the holistic contribution of states to that narrative, remains an open question.
- ii) Nuclear Energy Institute (NEI) Used Fuel Management Conference: Mr. Pitchford attended this conference on May 3 – 5, 2022, in Las Vegas, NV, and it was the first NEI Used Fuel Management Conference in several years due to COVID. He indicated that there were a few reoccurring themes, most of which hinted at a sense of renewed optimism within the industry. One theme

was the overall optimistic view of the state of nuclear energy itself brought about by interest in green energy and new technologies, as well as optimism that in the near future, SNF may be transported to the privately-run interim storage facilities that the NRC is considering licensing in West Texas and New Mexico. Another theme, of a slightly more somber note, was the serious concern regarding workforce shortage within the industry as longevous personnel retire and the ongoing difficulty associated with attracting and retaining younger workers. The conference opened with keynote speaker Kimberly Harshaw, Chief Nuclear Officer at South Texas Project Nuclear Operating Company, who focused on the importance of safety, quality, and public confidence. The speaker underscored the reality that every incident within the nuclear industry is magnified regardless of danger or consequence to the public, and this subsequently affects the industry as a whole. The conference featured two tracks, one called Used Fuel 2.0, which included topics such as building a workforce, looking at used fuel as a commodity, and environmental justice. The second track was the regulatory or technical track attended by Mr. Pitchford, and this track included sessions on regulatory challenges, aging fuel management, decommissioning, and the transportation of used fuel. Additional presentations were made by speakers David Pstrak (NRC), Brian Gutherman of Gutherman Technical Services, Jay Thomas from Orano TN Americas, and Jeff England from NAC International. The conference ended with video messages from congressional representatives Rodney Davis from Illinois and Mike Levin from California.

- iii) Palisades Community Advisory Panel (PCAP) Meetings: Greg Gothard (Michigan) presented on the PCAP meetings, which were held on January 26, March 9, and April 13. The fourth and final meeting of the calendar year would take place in late Fall 2022 per committee rules that state no more than four meetings will be convened each year unless the chair decides more are required. The PCAP will continue to meet through May 31 2027 unless a decision is made for a continuance of the committee's efforts. Speaker explained that the PCAP consists of 33 members from local jurisdictions including emergency managers from the three counties in which Palisades resides, and Mr. Gothard serves on the PCAP due to his involvement in radiological emergency preparedness and response. He will rotate off the committee when the supervisor with the radioactive materials unit rotates in. The Michigan Department of Natural Resources, the Public Services Commission and Unions, and the Pokagon Band of the Potawatomi are represented on the PCAP, and all meetings are open to the public. There have been 6 presentations, including presentations by Entergy, the owner of the plant, thus far.

The Palisades Plant shut down on May 20, which was 11-days ahead of schedule, due to a leak within the primary coolant system control rod mechanism. Palisades is now permanently shut down and Entergy will seek license transfer to Holtec upon approval by the NRC. The Southwest Planning Commission, the NRC Decommissioning Oversight Committee, the Economic Growth Institute out of the University of Michigan, and Holtec have all participated in the PCAP meetings. All meeting materials including meeting recordings are available on their website. Mr. Arvidson asked for clarity about why three meetings happened in close succession whilst the fourth meeting was delayed. Speaker indicated that this was due to the shutdown itself. As Palisades is heavily involved with the PCAP meetings, efforts were made to allow the plant to negotiate the logistics of shutdown before being involved in another meeting. The DOE delayed a visit to the plant for the same reason.

- iv) U.S. Department of Energy Office of Nuclear Energy (DOE-NE) Dresden/Morris Site Visits: Mr. Pitchford reported on the DOE-NE infrastructure evaluations held at the Dresden Nuclear Power Station and GE Hitachi Morris Sites. These evaluations were conducted on May 23 – 26, 2022. Speaker clarified that the Morris site is the only spent fuel storage site in the country that is located away from a reactor site. The facility was originally built to reprocess fuel but was never operational; thus, it has become de facto storage site. The evaluation was led by Mr. Maheras and Matt Feldman from Pacific Northwest National Laboratory (PNNL) and Ms. Bickford from DOE-NE, and included representatives from Federal, Tribal, and State partners. Mr. Arvidson attended as a

representative of the MRMTC along with Mr. Pitchford. These evaluations were the 17th and 18th evaluations conducted by Mr. Maheras, but the first evaluation conducted at an operating site. The evaluations included characterization of the fuel inventory, on-site and near-site infrastructure, and evaluation of transportation experience. The first day consisted of a tour of the infrastructure at the Morris facility, the second day consisted of a tour of the infrastructure at the Dresden facility, and day three focused on off-site infrastructure evaluation, including discussions with Canadian National Railway personnel who were open to questions and comments. Speaker commented that the proximity of the two sites to each other allowed near-site evaluations to be conducted for both facilities concomitantly. The final day consisted of meetings with local stakeholders, emergency managers, and Illinois state representatives. Speaker was unable to attend the final day, although Mr. Arvidson was. Mr. Arvidson indicated that county pride in the Dresden Station was on display, and he commented that the local stakeholders were very well informed of the DOE and power plant efforts. He also noted their appreciation of the DOE efforts.

Speaker stated that the DOE will publish their findings, but the seminal details are as follows: both sites have direct rail access that does require repair prior to movement of fuel. Conversations with the FRA and state representatives suggest that it is far easier to upgrade rail infrastructure than to install new. Further, the Dresden site has a barge slip available. Speaker indicated that both sites are in a decent position if and when fuel begins to move, and the expectation is that fuel will move by rail. Further, speaker indicated the positive and negative aspects of evaluating an operating facility. The positive is the abundance of site knowledge and experience of the personnel on site, from whom much can be learned, when an evaluation is conducted during operations. The negative is that infrastructure modifications are necessary before fuel movement can commence and this is complicated by the fact that the site is operational.

2. **Waste Isolation Pilot Plant Introduction and Update:** James Mason (DOECBFO) was accompanied by the management team from the WIPP office. Mr. Mason started by acknowledging limited engagement with the Midwest but indicated that there was a pre-Covid discussion about WIPP trucks travelling to the Illinois-Iowa area and suggested it may be a good idea to begin looking to the future for scheduling. He said WIPP is limited in how many trucks can be sent on roadshows each year, but he would like to schedule the Midwest area in the coming 24-months. Speaker indicated that the WIPP program in Carlsbad has a new office building for basing external emergency management programs, primarily the Radiological Assistance Program (RAP) Team. WIPP also gained access to the Permian Base and Regional Training Facility that is a fire academy; they will be conducting training out of that building for stakeholders.

Mr. Gothard asked whether WIPP tours are being held and whether associated training was available. The questioner indicated that he was in Michigan, but he did have interested personnel. Mr. Mason said that WIPP tours have been restarted in a limited manner and tours can be run in support of WIPP stakeholders. He advised the questioner to meet with Mr. Arvidson to determine whether a trip can be arranged. Another question was asked regarding the kind of training offered. Mr. Mason said that the TEPP/MERRTT program is available, though it is limited to direct stakeholders with a preference for "train the trainer" programs. Also training for Emergency Managers is available. He indicated that he had a budget to facilitate the training of stakeholders and encouraged groups to plan to visit, tour, and train. A question was asked about the reason behind the low number of ANL shipments to WIPP. The answer: ANL's waste is primarily remote-handled, and it requires shielded container assemblies. NRC approval has just been given for the last four variants that will be used including an additional two 30-gallon and two 55-gallon overpacks. Once those variants are in procurement, remaining waste will be shipped out. It was stated that ANL has been vocal proponents for the shielded containers, but it was noted that they do not have an abundance of waste as the remainder of their nuclear facilities are in decommissioning, and high volumes of waste are not expected.

3. **Naval Nuclear Propulsion Program (NNPP) Missouri Exercise:** Mark Salamon, Transportation Director at the Naval Reactor Field Office, was accompanied by Nicholas Plate, with the reactor refueling division at the NNPP headquarters in Washington D.C. Mr. Salamon (speaker) invited everyone to attend the next naval spent fuel

exercise, which is scheduled for September 14, 2022, in Moberly, MO. He explained that these exercises involve SNF shipments simulated as loaded and said that this year's exercise will involve a shipment from Virginia en route to Idaho. The shipment will be involved in a simulated road crossing accident. The M-290 shipping container, which is the container used for aircraft carrier spent fuel, will be used in the exercise, as will the new rail escort vehicle. Speaker indicated that these exercise simulations are conducted every two to three years after a question was posed about future exercises. Another question was asked that sought clarification of the circumstances of the simulated accident. Mr. Salamon reiterated that the accident will be simulated at a railroad crossing, but the exercise itself will be held in a railyard held by Norfolk Southern in Moberly. In the accident, a boom truck will strike the container's rail car, which then derails. The shipping couriers will be tasked with providing immediate emergency response on scene until civilian emergencies services representatives arrive. At that point, the couriers will defer to Command, and the NNPP will proceed with response and recovery activities. He stated that the primary objective of this exercise was "to socialize our shipping container characteristics, our shipping practices." Further cited objectives included confirmation of communication links, public affairs, and an evaluation of NNPP's ability to integrate into a joint information center. It was stated that whilst a full presentation will not be made this year, there was one held last year, which is available for review. Mr. Arvidson inquired about hotels in the vicinity of the simulation and logistics for individuals interested in attending. Mr. Salamon said that a block of rooms will be reserved at the Hilton Garden Inn in Columbia, Missouri, which is the location for the primary event and discussed the schedule. A question was posed about alternative scenarios for future exercises, to which Mr. Salamon responded by saying that the NNPP considered the railroad crossing accident the most credible scenario. He suggested that an additional nuance was added to this year's scenario – damage to a cooling fin – and that this added complexity to the simulation as it will simulate a higher radiation reading. In response to another question, speaker said that the NNPP works with a production company to produce DVD recordings of these exercises. Mr. Arvidson confirmed that the past exercises can be viewed on the MRMTC website in the digital library.

4. Regional Roundtable

The regional roundtable commenced with a reminder that comments should be keep to either transportation activity or status of any nuclear power plants within the state,

- a. Mr. Pitchford (Illinois): At this point in the calendar year, there were 99 shipments of radioactive waste originating within the state. There were 18 shipments of highway route controlled quantity (HRCQ) radioactive material shipments. It was acknowledged that 18 is a low number of shipments and the assertion is that a Cobalt supply is affecting shipments of HRCQ material. There were seven non-HRCQ shipments, zero WIPP shipments, and zero spent fuel shipments with one currently on the schedule. There have been no transportation violations. Total activity inspected escort shipments totaling 336,000 Terabecquerels. No change in operating status of power plants reported, but he stated Exelon corporation will split utilities, the result being that Constellation energy will take control of operation of all power stations within the state.
- b. Ms. Chaney (Indiana): Discovered that a permit fee is charged for low level radioactive waste travelling through the State and this fee is spelled out in Indiana code. The fee is \$100/shipment. It was also announced that the state is hiring a new transportation manager and is combining that role with another position. Additionally, Kaci Studer returns to the State, though she will not be working with the transportation program and will instead be the senior health physicist in the radioactive material controls program.
- c. Chris Boswell (Iowa): There have been 5 shipments escorted out of the state. As the Duane Arnold plant in Palo may not be shutting down, there is not a clear picture of what the future holds. More to come as more is learned.
- d. Mr. Saha (Kansas): There have not been any high-level shipments in the last quarter or year, though there have been quite a few low-level medical isotope shipments delivered through Kansas in the same period. There was an exercise scheduled last year that was postponed due to COVID, which will now take place in August.

- e. Mr. Gothard (Michigan): The Palisades shutdown is Michigan's big news. The NRC approved the license takeover in December 2021 and the sales transaction will happen after the plant permanently ceases operation and is defueled, which will happen in the next month or two. At that point, the license will transfer. Also included in the transaction is Big Rock Point, so Holtec will acquire both. The plan is to decommission the plant in 19 years. The first phase will transfer spent fuel to dry cask storage from 2022 – 2025. Then they will pause for 10-years to allow the decommissioning fund to mature. The decommissioning will continue then from 2025 – 2041 and then into safe storage in 2041 where it will remain until something else is to happen with the spent fuel. Additionally, they are working with the State Police to organize training with local tribes. The precise nature of the training and the participants have not yet been fully determined or identified. There is enthusiasm, however, for this kind of training and the possibility of holding multiple sessions. Finally, their drone work is progressing. More details will be included in tomorrow's breakout session on emerging technologies.
- f. Aaron Kallunki (Minnesota): There have not been any shipments yet this year. The two nuclear facilities have seen no change in operations or output.
- g. Ryan Seabaugh (Missouri): No transportation updates, but a quick plug was made for the spent nuclear fuel exercise that was mentioned earlier in Missouri.
- h. David Stradinger (North Dakota): North Dakota's high-level radioactive waste advisory council will meet virtually in the next week and a note of thanks was extended to Ms. Bickford from DOE-NE for identifying the speakers and her willingness to speak herself. Topics will include consent-based siting for federal interim storage facilities. Additionally, Mr. Stradinger reported that there were several highway route controlled quantity shipments this year but none have required escort, which is provided by the highway patrol who also performs the inspections.
- i. Mr. Snee (Ohio): There are two power plants operating at 100% capacity in the state, but the owners did plead guilty to bribing state officials and the trial will commence within the next six months. The transportation report was presented by Mr. Rumas, who indicated that within the last six to 12 months there were two HRCQ shipments. There was also a super-load of low-level waste that garnered quite a bit of attention in the state. It shipped into the state and then out again in a relatively short time, but it provided enough time for them to gather information using a drone. There were also several rail shipments from the Vermont Yankee decommissioning, two of which were Category 1 and the rest were Category 2. A few more shipments are anticipated in the coming months.
- j. Paul Schmidt (Wisconsin): Wisconsin has not seen any HRCQ shipments for about one and a half years, in keeping with the observations made by other state representatives. Mr. Schmidt noted that the Kewanee power plant made the decision to sell their license to a contractor to facilitate the decommissioning of the power plant, though this was embroiled in a lawsuit that has been resolved in favor of EnergySolutions. EnergySolutions will begin active decommissioning but will not start shipping materials out until early 2023. He encouraged this group or other similar agencies to invite Kewanee to these meetings so to forecast what is to come. Finally, speaker notes that this is his final meeting as the official alternate for the state and comments that it is important to identify another alternate without delay, as traditionally the alternate attends these meetings.
- k. Tribal Partners: Heather Westra of the Prairie Island Indian Community spoke. Speaker commented that the Prairie Island nuclear generating plant is immediately adjacent to the tribe's homeland. Whilst not yet public knowledge, Xcel Energy will seek a second license renewal for the plant with a possible extension to up to 20 years. At that point, the plant will have operated for 80 years. Additionally, they will extend the license for the Monticello plant for a 50-year term. Additionally, the speaker indicated Xcel is requesting permission from the public utility commission to use a different kind of cask. Currently the TM40 cask is used, but the company wishes to transfer to a canister-based system to facilitate transportation to an interim site. Minnesota Public Utility Commissions directed the Department of Commerce to complete an Environmental Impact Statement that includes transportation impacts. The Statement has been completed and is the first of its kind that considers use of casks at facilities and the transportation aspects thereof. At this point, the request to use canisters is back before the Public Utility Commission.

- I. Dan King from Oneida Tribe in Wisconsin spoke. Not much has changed since December. There will be a tour at month's end of Kewanee with another tribal group and they will discuss the loss of that facility. No other news.

5. Guest Presentations

- a. TEPP Activities in the Midwest: Mark Linsley. Mr. Linsley's biography was presented. He reviewed TEPP's mission and explained that it is intended to help first responders respond to radiological incidents. A slide was referenced showing transportation routes for DOE-EM use for environmental cleanup. A slide was discussed showing WIPP active and inactive routes. A slide showing National Nuclear Security site waste routes was discussed. Another slide showing rail shipment routes used by the Navy was reviewed, and speaker indicated that the navy carriers are being refueled. A table was discussed showing what training had been completed in the past year. Mr. Linsley indicated more is being done locally by States than through the TEPP program. He showed additional slides showing which trainings were conducted where and by whom in the last two fiscal years, as well as upcoming trainings. Speaker indicated trainings are still being scheduled. Mr. Linsley subsequently discussed improvements to online MERRTT trainings and other trainings for first responders and HAZMAT teams including an additional "flat sheet" development to assist responders with model procedures. These procedures can be adapted for individual use. He indicated a medical training course has been developed and referred to a slide showing the flat sheets for various first responder scenarios and contamination control. Speaker briefly discussed interagency cooperation, stating that TEPP has been able to expand into States where they were not previously such as Montana and the Dakotas by making inroads with the Military. Mr. Linsley referenced a slide regarding training for FEMA and Hazardous Materials Response Personnel including competency in handling a radiological incidence in a competent manner. He discussed which competencies are required by responders and how the testing and evaluation is handled as well as how competency is demonstrated. Speaker identified a shortcoming in radiological operations level training, as radiological was an annex to National Fire Protection Association (NFPA) training. The new NFPA has undergone a review of the training and expected competencies and how to demonstrate said competencies. Mr. Linsley indicated that errors have been reduced and outlines some changes including the addition of language of weapons of mass destruction and radiological hazards and ops-level mission specific content in the standard. He indicated these efforts were made to broaden training, and explains that the TEPP website is a warehouse for all information regarding the training. Handouts were provided to those at the table. Speaker asked for questions. There were none.
- b. Portsmouth Site Update: Dr. JD Chiou, spoke. Dr. Chiou, is the Director for Environmental Remediation at DOE Portsmouth Decontamination and Decommissioning (D&D) Project. His biography was presented. Speaker indicated the work going on in Portsmouth, OH, is actually the last DOE site to be cleaned up in Ohio. He stated that this is a very exciting time for DOE and the work has been supported by the many states that have absorbed the shipments associated with the cleaning up of those facilities. Dr. Chiou stated it has been a national effort to come to this point. Speaker provided historical background of the site including the transition from post-Cold War to support commercial nuclear power plant by generating fuel. Now starting in 2001, the focus has been on environmental cleanup. Full scale D&D began in 2010 with environmental remediation within a regulatory framework. The site has 3 large process buildings within which there are 4,000 stages to separate uranium isotopes. The process involves waste management practices that resulted in outside contamination, which is why environmental remediation is currently underway. The process building demolition started in 2011 but actual decommissioning started in May 2021. The target for completion is July 2022.

Dr. Chiou indicates he is happy to report that the decommissioning will be completed ahead of schedule. All the process gas equipment must be removed before the building is razed, and this is to confirm that there is sub-criticality isotopic abundance. It is also necessary to determine where to put the waste. The process gas equipment was sent to Nevada, which makes Portsmouth the largest shipper to Nevada for ten years. When that is complete, the rest of the building's chemical hazards

will be handled and removed. The multi-step process is responsible for the protracted nature of the decommissioning. Open air demolition requires the implementation of lessons learned elsewhere to ensure no further contamination.

Speaker showed slides demonstrating air monitoring equipment and processes. The monitoring equipment relies on real-time monitoring as well as traditional laboratory analyses. This twin approach ensures real-time response to any possible contamination. DOE invited the Ohio Environmental Protection Agency (EPA) and Ohio Department of Health to independently monitor the environmental data for public transparency. Additionally, uranium enrichment facilities are required to monitor the presence of transuranic elements during decommissioning, which is happening. The data is collected in real-time and published on the public website. This is an improvement on previous processes that often did not reveal data to the public for 2 years.

Dr. Chiou spoke about historical contamination. Soil required is 2.4x more than debris material to ensure full containment of contamination. The 1,200 acres will be available for reuse at the completion of remediation, as the DOE is working with Ohio EPA to remove historic landfills so that the land can become viable for local use again. Additionally, historically contaminated ground water plumes will be removed. Speaker referred to slides showing locations for the water plumes and landfills. The 231B landfill is currently in excavation, in which oil was disposed historically. The next component is the disposal facility, which must go through the regulatory process. A 1:1 scale model of the disposal facility was built to demonstrate the plan for a functional life of at least 1,000 years. He alluded to slides that show the disposal facility and indicates that the demolition was proceeding apace. One benefit of the location of this facility is that water cannot penetrate 20 feet below the surface. Overall, 5 million cubic yards of waste can remain on site and fully controlled. Speaker alluded to additional slides that list which wastes will remain on site and which wastes must be shipped away. The DOE will keep the high-volume waste with low radioactivity on site. Concentrated radioactive material will be shipped away.

Dr. Chiou shows a slide with an example of the debris/waste to be removed and discusses the timing of various components and wastes to be removed. A small quantity of equipment that exceeds U.S. Department of Transportation (DOT) requirements for U-235 remains on site. There is an operation to convert depleted uranium hexafluoride to a safe and nonhazardous component during the demolition. The resulting components can be sold and do have commercial value. He then referenced a slide regarding inspection of the conversion process and monitoring of the process. Speaker said that rail cars have been used to transport waste. DOE purchased rail cars for designated use and to transport the waste cylinders to the disposal facilities in Nevada, Utah, and Texas.

Another ongoing activity is the transfer of land to the community reuse organization. Parcel 1, of 80 acres, has already been transferred. Additional land will be available for transfer in September. The long-term DOE vision includes a hydrogen plant to be built in the cleaned and transferred land, which will be the basis to support clean industry in this location. The infrastructure in the area is robust and can support more industry and will be available for future industry.

Mr. Snee indicated that the Ohio Dept. of Health meets with Dr. Chiou's team weekly and is impressed with how well and quickly the process is going. An audience member mentioned that he wanted information about transportation aspects. He asked whether the vast majority of surface contaminated objects (SCO) are transported or remain on site. Speaker confirmed that low level SCO remains on site. Dr. Chiou confirmed small amounts of TRU waste being shipped away. The audience member asked about LSA (Low Specific Activity waste) leaving the site and asks about a projection for the movement. Speaker confirmed that transuranic isotopes are in the waste but that there is no transuranic waste; thus, the waste can be handled as low-level waste due to low concentration. The speaker indicated that only one site in Ohio had transuranics. The quantity of depleted uranium was discussed. Speaker confirmed only 50 tons remain. Nevada, Utah, and Texas are the sites that can receive transuranic waste by rail. Previous slides are referenced in the discussion regarding waste transportation to various locations in the West. Speaker indicated that there is quite a bit more waste to be transported out in the years to come. 99.97% of the curies will be shipped off site, which

equates to 85% of the waste volume will stay on site. This means that the curie waste is highly concentrated and thus needs to be implemented with care.

6. **Wrap-Up**

a. Committee Discussion

- i) Consideration of Committee Rules Changes: Mr. Arvidson indicated Mr. Pitchford's unprecedented election to Co-Chair at the Fall Meeting. Thus, committee rules must be updated to reflect that Mr. Pitchford, as an alternate, can serve as Co-Chair. Mr. Arvidson says a vote must be cast per rules for officers and/or co-chairs. Rules regarding who can serve and who can vote are read by speaker. A motion was made and seconded to change the committee rules. A vote was taken and counted by Mr. Arvidson. The vote was a unanimous "aye" for the rule change.
 - ii) Project Ideas for FY23: Mr. Arvidson invited committee members to suggest committee projects for the next year, including publications or the formation of new work groups. An individual recommended a WIPP tour. An individual recommended the development of a Midwest Training Calendar. Mr. Arvidson indicated the training calendar would require collaboration by individual committee members to send updates to speaker. Mr. Arvidson suggested that a WIPP tour could be facilitated by holding a committee meeting in the Carlsbad area.
 - iii) Work Group Assignments: Mr. Snee ran through all groups and all current members. Moderator asked whether anyone present was interested in joining and/or being removed from the working groups. It was indicated Mr. Rumas may replace Tom Forbes on the NTSF Rail/Routing AHWG. Moderator also indicated that efforts could be made to add additional members to the groups if it is thought they are needed. No additional working groups were added during the meeting.
 - iv) Fall Meeting: Mr. Arvidson indicated that a handout held a list of all the locations where meetings had been held. All states have hosted meetings with the exception of the Dakotas. He indicated a preference for avoiding bitter cold weather and invited individuals to identify dates in November and December that should be avoided. After due consideration, October 12-13 were selected. Subsequent discussion considered location. Mr. Arvidson indicated he would commence work with the meeting planner internal to CSG to explore venues in the Dakotas.
- b. Review Action Items: Ms. Treland indicated that Mr. Arvidson must contact Mr. Mason regarding a WIPPTREX (transportation exercise) within the next 24 months. There must be an invite for the naval nuclear propulsion program exercise in Missouri. Ensure Mr. Arvidson finds a Wisconsin alternate for the committee. Ms. Westra must send an environmental impact statement (EIS) for Prairie Island to Mr. Arvidson. Look into WIPP Tour, Midwest training calendar, Mr. Rumas placement on Rail Routing group, and Mr. Saha to join Spent Fuel Transportation group. Mr. Snee asked for further items.
- c. Closing Remarks: Mr. Snee thanked everyone for their attendance and expressed gratitude for being able to meet again in person.

7. **Adjourn**

ATTENDEES

Committee Members:

Christopher Boswell, Iowa
Sarah Chaney, Indiana
Nick Emme, South Dakota
Greg Gothard, Michigan
Kelly Horn, Illinois
Aaron Kallunki, Minnesota
Rodney Pitchford, Illinois
Tad Rumas, Ohio
Swapan Saha, Kansas
Waylon Sanford, Michigan
Paul Schmidt, Wisconsin
Rep. Mark Schreiber, Kansas
Ryan Seabaugh, Missouri
Michael Snee, Ohio
David Stradinger, North Dakota

Tribal Representatives:

Ron Johnson, Prairie Island Indian Community
(PIIC) & Tribal Radioactive Materials
Transportation Committee (TRMTC)
Daniel King, Oneida Nation
Heather Westra, PIIC

Other Attendees:

Mark Abkowitz, Vanderbilt University
Mitch Arvidson, Council of State
Governments (CSG) Midwest
J.D. Chiou, Fluor-BWXT Portsmouth, LLC
Scott Doig, U.S. Bureau of Indian Affairs (BIA)
Zenghu Han, Argonne National Laboratory
(ANL)
Sara Hogan, U.S. Department of Energy Office
of Nuclear Energy (DOE-NE)
Shannon Thompson, Pacific Northwest
National Laboratory (PNNL)
Kathy Treland, CSG Midwest
Veronica Wilson, PNNL

ACTION ITEMS

States:

- All will mark their calendars for the MRMTC Fall 2022 Meeting: October 12 – 13 in either Rapid City or Sioux Falls, SD
- All will mark their calendars for the 2023 Annual Meeting of the National Transportation Stakeholders Forum (NTSF): May 22 – 25 in St. Louis, MO
- All will mark their calendars for the Naval Nuclear Propulsion Program (NNPP) Transportation Exercise: September 14 in Moberly, MO
- All will provide updated state information for the [*Planning Guide for Shipments of Radioactive Material through the Midwestern States*](#) to Mitch Arvidson (CSG Midwest) when requested
- Mike Snee (Ohio) and Rodney Pitchford (Illinois) will attend the U.S. Department of Energy Office of Nuclear Energy's (DOE-NE) Transportation Core Group Meeting: August 30 – 31 in Cincinnati, OH
- Rep. Mark Schreiber (Kansas) will serve as the MRMTC Legislative Liaison to the Midwestern Legislative Conference (MLC) and deliver a report to the 76th Annual Meeting of the MLC: June 10 in Wichita, KS
- Allan Barker (U.S. Nuclear Regulatory Commission (NRC)), Michael Bradley (Pokagon Band of Potawatomi Nation), Sarah Chaney (Indiana), Scott Doig (U.S. Bureau of Indian Affairs (BIA)), Greg Gothard (Michigan), Tim Grant (Omaha Tribe of Nebraska), Aaron Kallunki (Minnesota), Dan King (Oneida Nation), Tansey Moore (National Conference of State Legislators (NCSL)), Lauren Rodman (North Wind Site Services), and Heather Westra (Prairie Island Indian Community (PIIC)) will serve on the MRMTC Regional Tribal Engagement Work Group
- Mr. Gothard, Swapan Saha (Kansas), and Ryan Seabaugh (Missouri) will serve on the NTSF Section 180(c) Ad Hoc Working Group (AHWG)
- Edward Engle (Iowa), Kelly Horn (Illinois), Jamie Reyes (Nebraska), Tad Rumas (Ohio), Waylon Sanford (Michigan), and Brian Vercruyse (Illinois) will serve on the NTSF Spent Nuclear Fuel (SNF) Rail/Routing AHWG
- Christopher Boswell (Iowa), Mr. Gothard, and Mr. Rumas will serve on the NTSF Transportation Emergency Preparedness Program (TEPP) AHWG
- Ms. Chaney and Mr. Saha will serve on the NTSF Spent Fuel Transportation Materials AHWG

Staff:

- Mr. Arvidson will post all meeting materials to the [committee website](#)
- Mr. Arvidson will contact James Mason (DOE Carlsbad Field Office (CBFO)) within the next 24 months regarding a Waste Isolation Pilot Plant Transportation Exercise (WIPPTREX) at the Illinois-Iowa border
- Mr. Arvidson will pursue a gubernatorial appointment from Wisconsin and make sure that gubernatorial appointee then appoints an alternate
- Mr. Arvidson will begin a hotel search in Rapid City and Sioux Falls, SD, on October 12 – 13 for the MRMTC Fall 2022 Meeting
- Mr. Arvidson will solicit state information updates for the *Planning Guide for Shipments of Radioactive Material through the Midwestern States*
- Mr. Arvidson will update the Committee Rules as voted upon and post the updated rules online
- Mr. Arvidson will coordinate with DOE-NE on the Transportation Core Group Meeting in Cincinnati, OH, on August 30 – 31
- Mr. Arvidson will coordinate with DOE-NE on any site visit(s) that they may have in the Midwest region
- Mr. Arvidson will continue planning for the Midwest-hosted 2023 Annual Meeting of the NTSF in St. Louis, MO, on May 22 – 25
- Mr. Arvidson will consider when the MRMTC might be able to take a tour of WIPP
- Mr. Arvidson will put together a calendar of training opportunities throughout the Midwest

Observers/Others:

- Mark Salamon and Nicholas Plate (NNPP) will invite MRMTC committee members to the NNPP Exercise in Moberly, MO, on September 14, 2022

- Ms. Westra will send Mr. Arvidson the recently completed environmental impact statement (EIS) on Prairie Island Nuclear Power Plant's license extension application