

**Midwestern Radioactive Materials Transportation Committee (MRMTC)
Fall 2019 Meeting Summary**

**Indianapolis, Indiana
November 14, 2019**

AGENDA ITEMS

1. Welcome and Introductions

- a. Committee Co-Chair Greg Gothard (Michigan) welcomed attendees, introduced himself, and let the group know that Erica Bickford (DOE-NE) was joining the meeting via telephone. Mr. Gothard invited all attendees to introduce themselves and acknowledged Committee Co-Chair Kaci Studer (Indiana) and thanked her, Kelly Horn (Illinois), and Steve Bertonaschi (Ohio) for helping plan the [Transportation Tabletop Workshop](#) that was held on the previous day.

2. U.S. Department of Energy (DOE) Program Reports and Committee Discussion

a. Carlsbad Field Office (CBFO) and TRANSCOM

- i) Bobby St. John reported that the Waste Isolation Pilot Plant (WIPP) was designed for a 30-year operating life span but has had its mission extended to at least 2050. Therefore, there have been many capital projects taking place to upgrade the facility, including new salt reduction and filter buildings that are part of the safety significant confinement ventilation system (SSCVS). Additionally, a new utility shaft and a new north access bypass road are being built. WIPP is aiming to have 14 transuranic (TRU) waste shipments per week. These will predominantly come from Idaho National Laboratory (INL) and Los Alamos National Laboratory (LANL) for the next 10 years.
- ii) Lisa Janairo (CSG Midwest) asked Mr. St. John why shipments from the Savannah River site were using TRUPACT III containers for the first time in many years and if there will be any staffing changes at CBFO that will affect the cooperative agreement groups. Mr. St. John said that nothing happened with the TRUPACT III containers, just that they haven't made any shipments from the Savannah River site since the WIPP incident in 2014 and the program was finally getting started again. Regarding staffing at CBFO, Mr. St. John said that James Mason is working on three separate roles right now and as a result, Mr. St. John is becoming and will continue to be more involved with transportation and the cooperative agreement groups. CBFO is trying to hire more staff but hasn't had much success in doing so.
- iii) [Click here for Mr. St. John's presentation.](#)

b. Office of Environmental Management (EM)

- i) Ellen Edge reported that the slides and information regarding high-level waste (HLW) and greater than Class-C (GTCC) interpretations were removed because there have been no changes since last year's update and DOE's General Counsel (GC) did not believe they should be included. Ms. Edge clarified that her Office of Packaging and Transportation (OPT) within EM is under a different DOE Undersecretary than the Office of Nuclear Energy (NE) and CBFO. She expressed her gratitude that there is a

lot of collaboration between the three offices and credited Ms. Bickford for that. This year marks the 30th anniversary of the EM Program. EM is focused on safely and efficiently cleaning up the legacy waste sites created from the country's nuclear weapons and nuclear energy research and development. Ms. Edge stressed the importance of maintaining connections with states and Tribes to get this work done. EM has six primary mission areas in FY2020 and will eventually work itself out of jobs as various sites are closed. OPT is in transition with the departure of its Director Joanne Lorence. Demitrous Blount (DOE-EM) is serving as the acting Chair of the National Transportation Stakeholders Forum (NTSF) until a replacement for Ms. Lorence is found. Ms. Edge reported that a lot of the comments and work done by states and Tribes on past revisions of the 460.2 Transportation Practices Manual will be rolled into the new Order 460.2B. With the holidays and departure of Ms. Lorence, the Integrated Project Team working on the new Order hopes to have something available for review in the next few months.

- ii) Ms. Janairo asked what Ms. Edge meant by "possible" non-classified shipping routes being publicly available and if these routes will be available on the START system? Ms. Edge explained that "possible" means that only routes that are currently being used will be available, so if a site isn't shipping, the routes they would use won't be available. A DOE intern worked to move routes from START and TRAGIS into a searchable format on Google Maps, but the complicated nature of the routes makes Google Maps move very, very slowly. However, DOE-EM is working to make the system more user friendly. Ms. Janairo asked if it would be appropriate to organize an NTSF ad-hoc working group (AHWG) to generate input for the soon-to-be-released Order 460.2B, or if the state regional groups (SRGs) should organize outside of the NTSF. Ms. Edge said there is no current timeframe for the comment period and that, if a 90-day period is approved, it might be possible to organize an AHWG. If the comment period is shorter, Ms. Edge suggests that the SRGs and Tribes work individually or together but outside of the NTSF. Ms. Janairo stated that she would like to work with the other regions and the Tribal Radioactive Materials Transportation Committee (TRMTC) to designate members to review the new Order as soon as it comes out.
 - iii) [Click here for Ms. Edge's presentation.](#)
- c. Office of Nuclear Energy
- i) Ms. Bickford reported that the Office of Integrated Waste Management (IWM) within DOE-NE is waiting for direction from FY2020 appropriations. Both House and Senate appropriations bills have language for DOE to pursue interim storage. Therefore, DOE-IWM is prioritizing work areas that would directly support an interim facility, including transportation planning. Ms. Bickford's work with the NTSF Rail/ Routing AHWG is continuing and Mel Massaro and Jeff Moore of the Federal Railroad Administration (FRA) are working to incorporate state and tribal comments into the new version of the Safety Compliance Oversight Plan (SCOP). Once that is completed, they will turn their attention to the reciprocal rail safety inspection protocol. DOE-NE is planning a site visit to the Dresden Nuclear Generating Station in Illinois in April or May. This and other site visits are done to assess the onsite and near-site transportation infrastructure. Dresden will be visited because DOE-NE has received

direction to follow the oldest fuel first (OFF) model of spent nuclear fuel (SNF) transportation and Dresden has some of the oldest SNF at its storage facility. Ms. Bickford reported that DOE-NE is continuing to maintain and upgrade tools like START. DOE-NE originally thought that seven years would be needed to fully plan SNF shipments, but new analysis makes them think shipments could be possible five to six years after receiving instructions to ship.

- ii) Heather Westra (Prairie Island Indian Community) asked why the decision was made to go back to an OFF model. Ms. Bickford explained that the previous presidential administration had prioritized shipping from shutdown sites first, as recommended in the report of the Blue Ribbon Commission on America's Nuclear Future, but the current administration has reverted its policy to the original OFF model. Of course, utilities can trade slots among themselves, so the actual order remains to be seen. Ms. Studer asked if DOE has a proposed timeline for completing the eight-axle railcar. Ms. Bickford reported that they are currently still in the design phase and a timeline for fabrication, testing, etc. will come after. Mr. Gothard asked if DOE-NE is revisiting any sites because of the possible changes in the shipping queue. Ms. Bickford reported that there are no plans to revisit sites. Ms. Janairo asked if work on Section 180(c) funding will be starting back up. Ms. Bickford said that a lot hinges on Congressional direction and that if they pursue interim storage facility(ies), transportation would be a major focus, but if they pursue Yucca Mountain instead, transportation would take a backseat to siting, licensing, and construction for now.

d. NTSF-related Reports

- i) *Planning Committee*: Ms. Studer reported that the Planning Committee has continued planning for the next NTSF meeting in May 2020 in Scottsdale, Arizona. The committee also approved a new NTSF charter and Ms. Edge will be working on the new management plan. Ms. Studer also reported that some members find the wiki site to be too cumbersome and Planning Committee members are looking into possible new platforms.
- ii) *Communications AHWG*: Mitch Arvidson (CSG Midwest) reported that the Communications AHWG has been sunset for the time being because there was little desire to update the DOE-NE fact sheets and the NTSF doesn't have any big public information campaigns to work on. Quarterly NTSF newsletters will continue but will be under the direction of the Planning Committee. If important shipping campaigns or other events of public interest begin, the Communications group will likely reboot.
- iii) *Transportation Emergency Preparedness Program (TEPP) Training AHWG*: Mr. Gothard reported that there will be revisions to the Modular Emergency Response Radiological Transportation Training (MERRTT) program in 2020. There will be a full version and a compressed version along with new functions like "build your own training." Ms. Edge's presentation has more details. Draft materials of the new program were sent out to the TEPP Training AHWG in October.
- iv) *Management Plan AHWG*: Ms. Edge reported that the group will get going in the first week of December. The group will be updating sections so that the management plan more closely aligns with the updated NTSF Charter, adds language about the wiki site and incorporates suggested changes from the past year. Ms. Edge is confident that these will be the last significant edits of the management plan going forward.

- v) *SNF Rail/ Routing AHWG*: Tiffany Drake (Missouri) reported that members of the MRMTC got together to comment on the updated version of the SCOP, which was helped by a document that Ms. Janairo created comparing and contrasting the previous and proposed versions. One significant question that came out of that review was confusion over who the new SCOP was written for. The comments requested that the proposed SCOP be made more understandable for a general audience. Ms. Drake reported that comments were due at the end of September and that the next meeting had not been scheduled but the AHWG was looking at early December.

Ms. Janairo asks if state-level rail inspectors and laborers can join the AHWG. Ms. Bickford answered that they cannot be full members, but they can be included on information collection and distribution. Ms. Drake asked when next webinar/call of the AHWG will be. Ms. Bickford said that it depends on completion of the SCOP edits by Mr. Moore and Mr. Massaro of the FRA. Mr. Moore reported that he and Mr. Massaro need to find time to sit down together and work to incorporate the state and tribal comments but doesn't foresee another AHWG meeting until the end of January 2020. Ms. Drake asked about a supposed GTCC shipment from the Vermont Yankee (VY) site. Mr. Moore explained that they thought a GTCC rail shipment had gone to Waste Control Specialists (WCS) in west Texas from VY, but that it was just low-level waste (LLW). Mike Valenzano (Orano) said that he will present about these shipments later in the day. David Pstrak (Nuclear Regulatory Commission (NRC)) explained that there is a lot of confusion about the term "GTCC." It is a disposal term and not a transportation term and shouldn't cause any alarm. Nicolas Guibert (Orano) asked if the SCOP is supposed to be applicable for all radioactive waste shipments by rail. Mr. Moore said that it is just for SNF shipments as it is currently written.

3. NTSF 2020 Planning

- a. Kevin Moss (Western Governors' Association (WGA)) explained that his organization is co-hosting the 2020 NTSF Meeting with the Western Interstate Energy Board (WIEB). Mr. Moss explained that they went through the preliminary agenda at the western regional meeting in October and they're hoping to have a roundtable session about international shipments from Canada to the Savannah River Site. Mr. Moss asked for help from all the regions to brainstorm session ideas. One possible session he mentioned would be from April Sanborn (Nevada) on her state's regulations of autonomous vehicles. Mr. Blount passed along a suggestion by Mr. Mason to have a financial grant workshop at the NTSF meeting that would bring together the financial managers of all the different SRGs. Ms. Janairo said it was not likely that CSG would send financial staff to the NTSF meeting just for a half-day workshop. She suggested a few conference calls as an alternative. Mr. Moss said that there would be an updated draft agenda distributed for the November 25 call of the NTSF Planning Committee.

4. Cooperative Agreement Group Reports

- a. TRMTC: Ms. Westra reported that TRMTC hosted the 2019 NTSF Meeting in Arlington, Virginia, and had about 200 attendees. TRMTC has submitted comments on many draft documents including the SCOP. Ms. Westra said that a paper written by members of the TRMTC, called "The Role and Authority of Tribes in High-Level Radioactive Waste Transportation," was presented at the International Symposium on the Packaging and Transportation of Radioactive Materials (PATRAM) in August in New Orleans. TRMTC will

be having their midyear meeting in January in Scottsdale, Arizona, where they will take a deep dive look at transportation issues.

- b. Northeast High-Level Radioactive Waste Transportation Task Force: Veena Gubbi (New Jersey) reported that the task force had its Fall Meeting two weeks prior in Roswell, New Mexico. Representatives from many groups attended the meeting and several were able to tour the WIPP site. Ms. Gubbi had to miss the meeting and the tour because of a government inspection at the Oyster Creek Nuclear Power Plant. Ms. Gubbi reported that the three Yankee Nuclear Power Plants need 20-year extensions for their dry storage cask licenses and that they are still suing DOE for damages for not taking ownership of SNF. Ms. Gubbi reported that DOE made a site visit to the Pilgrim Nuclear Power Plant in Massachusetts the week prior. Finally, Ms. Gubbi expressed her appreciation of the Transportation Tabletop Workshop held the previous day in part because of Holtec's ownership of Oyster Creek and the real possibility of licensee shipments in New Jersey.
- c. Southern States Energy Board (SSEB): Christopher Wells reported that SSEB had their annual meeting in September, at which Mr. Wells was able to brief and talk with several governors. DOE Secretary Rick Perry was scheduled to speak at the meeting but cancelled. However, John Kotek from the Nuclear Energy Institute (NEI) gave a well-received presentation on advanced nuclear energy. A TEPP Radiation Specialist class will be held in Meridian, Mississippi, in January. Mr. Wells also reported that Mississippi Emergency Management Agency (MEMA) will be hosting a radiological transportation exercise in March. The exercise will simulate a vehicle carrying radioactive oil colliding with a fuel tanker which then collides with a vehicle shipping ammonia. In other SSEB news, the radioactive transportation-related groups will be meeting in Miami, Florida, in December. Ms. Janairo asked if SSEB will be discussing their hosting of the 2021 NTSF Meeting. Mr. Wells said that he will be consulting with his committee at their December meeting to narrow down the location to at most four locations.
- d. WIEB: Fred Dilger (Nevada) reported that WIEB had its Fall Meeting in Las Vegas, Nevada, in October with WGA. There were several presentations during the meeting, including ones covering the refurbishment of the nation's nuclear weapons arsenal, NRC's numerical modeling of radioactive waste casks, autonomous vehicles, and the boring activities of Elon Musk's company in the Las Vegas area. Mr. Dilger also reported that WIEB is finishing up the last five of its policy papers.
- e. WGA: Mr. Moss reported that WGA is helping to plan for shipments from the Lawrence Livermore National Laboratory in 2020. They must wait for the snow to melt in the Sierra Nevadas but not wait so long to possibly encounter wildfires. There will be two campaigns of about three casks each when shipments begin.

5. Nuclear Energy Institute Legislative and Political Update

- a. Rod McCullum reported that he believes there is no chance of any standalone SNF legislation passing in this Congress. The only federal legislation that could affect radioactive materials transportation is through appropriations bills. Unfortunately, these are also unlikely to advance in the middle of presidential impeachment hearings. Regardless, neither House nor Senate appropriation bills have funding for Yucca Mountain. They do, however, have funding for consolidated interim storage facilities (CISF). If a full-year continuing resolution is passed, there will be no federal movement in 2020. Either way, the nuclear industry is prepared to move forward with do-it-yourself

shipments if the federal government does not take action. Basically, storage legislation is stuck until a new Congress and a new president. With that being said, Mr. McCullum then laid out the differences between the two appropriations options. With the House bill, \$25 million would be given with few strings attached for a CISF pilot. With the Senate bill, only \$10 million would be given with a lot of strings attached. The Senate version is specifically written to receive shipments from decommissioned sites and would implement many of the BRC recommendations, including consent-based siting. It remains to be seen if this “consent-based siting” would be actual stakeholder consent, or just “pen stroke” consent. So, the basic choice is \$25 million with no strings attached, or \$10 million with lots of strings attached. Mr. McCullum said he hopes neither option goes through. The nuclear industry is uncomfortable with moving forward on one or more CISFs without a guaranteed permanent repository.

- b. Mr. Arvidson asked if there are any legislators who will take over the push for a national repository once this current generation retires, e.g. John Shimkus? Mr. McCullum reported that there is an heir apparent and that there’s a tremendous amount of bipartisan support for Yucca Mountain or a similar permanent repository. Ms. Westra asked where states and Tribes might go for training and emergency response funding if licensee shipments go ahead without 180(c) funding. Mr. McCullum said that’s why he thinks groups like the MRMTC should begin engaging with other departments that may have applicable appropriations like the Department of Homeland Security (DHS). He went on to say that industry is currently in Phase 1 of building relationships with state and tribal stakeholders ahead of possible SNF shipments that may begin in three to five years. Ms. Janairo asked if states may be able to get funding through the utilities’ damages from their lawsuits against DOE. Mr. McCullum said that he can’t advocate for that but sees a possible path for storage costs but not transportation costs being covered that way. Mr. Gothard asked if the nuclear industry has determined a philosophy about shipping queues if they begin to ship SNF. Mr. McCullum said that there is a general consensus to ship from shutdown sites first. This gets to the policy of “getting to build.” The nuclear industry wants to build more power plants, and they must demonstrate that they can efficiently clean up shutdown sites in order for nuclear to be seen as a viable energy option. Ms. Drake asked how industry can target a three to four-year SNF planning timeframe when DOE-NE prefers a five to six-year timeframe. Mr. McCullum explained that without having to wait for congressional action and government bureaucracy, industry could cut a year or two out of the planning timeline. Mr. McCullum finishes by highlighting NEI’s attempt to connect nuclear energy to the decarbonization of America’s energy grid. He said that the industry is not as down as one might think about shutting down plants because it could provide an opportunity to build more modern and efficient nuclear plants that help achieve the nation’s climate change goals.

6. Nuclear Regulatory Commission (NRC) Update

- a. Mr. Pstrak provided a report to the committee about the transportation of radioactive material in Type B packages and related activities of the NRC. He explained the NRC’s role in regulating SNF shipments and the typical timeline for an NRC review of transport and storage applications. Mr. Pstrak also updated the committee on WCS’ and Holtec’s CISF applications. The NRC is in the midst of a three-year process to harmonize U.S. regulations with the International Atomic Energy Agency (IAEA), and the Department of Transportation (DOT) is also involved in this process. Mr. Pstrak described two incidents

that the NRC investigated, including one where a package experienced 12 mrem/hour of radiation. It was determined that an unqualified individual had loaded the package; Mr. Pstrak emphasized that, when requirements are followed, safety is ensured. Additionally, there was a separate incident involving a passenger car hitting a shipment of depleted uranium hexafluoride (DUF6). Despite the impact's severity, the package was fine. When discussing radiation level limits, Mr. Pstrak contrasted the relatively low levels of radiation that Type B packages may emit to the levels experienced in everyday life. This shows, in his words, that "these are not mobile Chernobyls." Mr. Pstrak went on to list NRC studies and public meetings that may interest the MRMTC, some of which are listed below.

- i) ["Issues Paper on Potential Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements"](#)
 - ii) "Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes," [Vol. 1](#) and [Vol. 2](#)
 - iii) "Shipping Container Response to Severe Highway and Railway Accident Conditions," [Vol. 1](#) and [Vol. 2](#)
 - iv) ["Reexamination of Spent Fuel Shipment Risk Estimates"](#)
 - v) ["Spent Fuel Transportation Package Response to the Baltimore Tunnel Fire Scenario"](#)
 - vi) ["Spent Fuel Transportation Risk Assessment"](#)
 - vii) ["A Compendium of Spent Fuel Transportation Package Response Analyses to Severe Fire Accident Scenarios"](#)
 - viii) ["Safety of Spent Fuel Transportation"](#)
 - ix) ["Physical Protection of Shipments of Irradiated Reactor Fuel"](#)
- b. [Click here for Mr. Pstrak's presentation.](#)

7. Interim Storage Partners (ISP) Presentation

- a. Jeff Isakson is the CEO of ISP and presented on the company's proposed CISF near Andrews, Texas, on the border with New Mexico. ISP submitted their license application in April of 2016 and the NRC review should be completed by May of 2021. NorthStar bought WCS, the site of ISP's proposed SNF CISF, in June 2018. This acquisition restarted the review process for NRC and led to more requests for additional information (RAIs). ISP is in the process of responding to these RAIs. The initial license applications targeted the storage of SNF from shutdown reactors with fuel that is ready to transport today. The CISF will be a concrete storage pad with concrete overpack. Mr. Isakson explained that there have been thorough environmental characterizations conducted by Texas Commission on Environmental Quality (TCEQ) and the NRC. The proposed ISP site already has rail infrastructure to support heavy loads and WCS and ISP are holding regular community outreach events in the Andrews, Texas, area.
- b. Mr. Gothard asked if ISP plans to do any outreach to the communities along the shipping corridor. Mr. Isakson answered that ISP will not be the title holder to the fuel while it is en route so that would be the purview of the shipper. Mr. Valenzano explained that licensees will be organizing the SNF shipments but he hopes that Orano and other transporters can work with them to plan the shipments and conduct community outreach. Mr. Wells asked if

ISP is planning on sharing some of the economic benefits of a CISF with the locality. Mr. Isakson said those discussions haven't happened yet, but they plan to share with the community. Ms. Studer asked how long it would take to build the site if the NRC license is approved by May 2021. Mr. Isakson said the site could be operational by mid-2023 but they first need to secure contracts with licensees. Mr. Dilger asked what the capacity of Phase 1 would be. Mr. Isakson said the initial phase could store 5,000 metric tons and could be expanded to 40,000; any more than that would require a revised environmental impact statement (EIS). Ms. Westra asked, if the utilities still hold title to the SNF while its stored at ISP, will they continue to seek damages from DOE? Mr. McCullum responded that as long as the title is not with DOE, the industry can still seek damages for any costs that they incur.

c. [Click here for Mr. Isakson's presentation.](#)

8. Orano TN Transportation Presentation

a. Mr. Valenzano presented Orano TN Transportation's work as a subcontractor to NorthStar's decommissioning of the Vermont Yankee Nuclear Power Plant. Orano is working specifically on the segmentation, packaging for disposal, and transportation of the reactor vessel and its internal structures. These shipping campaigns do not involve any packaging or shipping of SNF but have a similar scope in weight and distance. Mr. Valenzano showed two videos displaying the operations at VY. Complete site restoration is scheduled to be done by 2026. Lots of material will be shipped from VY, but Mr. Valenzano's presentation focused on higher level shipments that will use MP197HB transport casks. Orano has made dry run tests of shipping and transferring these casks from VY to WCS. They estimate the round trip for this shipment to be 40 days. The probable routing from Vermont to Texas will most likely involve midwestern states. The shipping campaign will involve category 1 and category 2 quantities of radioactive material - essentially, irradiated stainless steel of various sizes. Orano is planning for three shipments of category 1 material and six shipments of category 2 material. For the category 1 shipments, they are required to preplan and coordinate with affected states and are planning to do so two months ahead of the scheduled start. Orano will be reaching out to the governor's designees in the coming month or two. Shipments are scheduled to start in February 2020.

b. Ms. Studer asked if there is a timeframe for completion of these shipments. Mr. Valenzano said with a 40-day turnaround and nine shipments, the campaign should be finished in mid-2021. Mr. Dilger asked who operates the short line rail to WCS, how the specific route will be chosen, if the shipments will travel in general freight, and if so, how much longer does that take than specialized train shipments. Mr. Valenzano answered that the Texas & New Mexico railway operates the short line, that Orano provides information to the railroads and they look at their clearance requirements and other factors and then recommend a route to Orano. The shipments will travel in general freight, and a specialized train shipment would only save a few days at most. Ms. Westra asked if Orano will be notifying Tribes along the routes. Mr. Valenzano said they have only identified the Seneca Nation of New York as being on the route, but that they will notify them.

c. [Click here for Mr. Valenzano's presentation.](#)

9. Committee Business Session

- a. Co-Chair's Report: Mr. Gothard and Ms. Studer provided the co-chair's report. Mr. Gothard expressed his appreciation for the opportunities that the states and Tribes have to interact on a regular basis. He also addressed the challenge and opportunity of turnover in committee membership. Mr. Gothard also mentioned the resumption of WIPP shipments in the region and the MRMTC's focus on increasing tribal engagement. Ms. Studer spoke about the Transportation Core Group Meeting that she, Mr. Gothard, Ms. Janairo, and Mr. Arvidson attended in August. She believed it was a very good meeting and that attendees were able to speak with the Director of DOE-IWM, Nancy Buschman, and the Assistant Secretary for Nuclear Energy, Rita Baranwal. This was a good opportunity for states and Tribes to stress their desire to move forward on several transportation topics.
- b. Project Update: Ms. Janairo provided an update to the status of the Midwestern Radioactive Materials Transportation Project. She discussed the funding statuses of the three cooperative agreements with CBFO, NE, and OPT. More details on the project were provided in the committee's briefing folders.
- c. Decommissioning Guidance Brochure Update: Mr. Arvidson updated the committee on the "Nuclear Power Plant Decommissioning Guidance for States" brochure. He thanked Mr. Bertonaschi and Mr. Horn for their help creating the brochure. It has the same content that was approved at the Spring MRMTC Meeting in Arlington, Virginia, but has undergone a redesign with the help of the design team at CSG's national headquarters. The brochure is available [online](#), and members should let Mr. Arvidson know if they would like physical copies.
- d. Planning Guide Update: Mr. Arvidson gave an update regarding the *Planning Guide for Shipments of Radioactive Material through the Midwestern States*. He thanked Rodney Pitchford (Illinois), Paul Schmidt (Wisconsin), and Michael Snee (Ohio) for their review and revisions of the previous version. Physical copies of the book finally arrived in the CSG Midwest office shortly before this meeting and were sent out to committee members and other interested parties shortly thereafter. An [online version](#) is also available, and attendees should reach out to Mr. Arvidson at marvidson@csg.org if they would like hard copies.
- e. Transportation Security Unified Stakeholders Group: Mr. Horn spoke about a new initiative that the National Nuclear Security Administration (NNSA) organized in August. The first meeting took place in Washington, D.C., in September with about 70 participants from several federal agencies, states, industry, law enforcement, etc. The meeting was meant to harmonize procedures and protocols for category 1 and category 2 source shipments. The group will meet throughout the year via web meetings as well as having an in-person meeting in the Fall of 2020. Mr. Horn would like to get some representatives from the group to attend and participate at the NTSF Meeting in May. The first day of the September meeting was for table setting and allowing the various stakeholders to choose the group's priorities. Those priorities are as follows:
 - Threat awareness;
 - Cataloguing best practices;
 - Developing clear guidance on source shipping;
 - Developing standardized security plans;

- Defining the mission of stakeholders;
 - And, reviewing operational differences among stakeholders.
- f. Naval Nuclear Propulsion Program (NNPP) Exercise: Ms. Drake explained that the U.S. Navy ships used nuclear cores from submarines to the Hanford site in Washington state. These shipments go by rail through a number of states. Every three years, previously every two, the NNPP holds emergency response trainings. The most recent exercise in the Midwest was held in Fort Wayne, Indiana. In 2020, Missouri will host an NNPP exercise in Moberly, Missouri. The first planning meeting between NNPP staff and state of Missouri staff will take place on December 4, 2019. The NNPP staff will plan the accident scenario and hold a tabletop exercise sometime in the Summer of 2020. The exercise itself will be in September of 2020. Ms. Janairo inquired if it might be a good idea to host the MRMTC's Fall Meeting in conjunction with the NNPP Exercise. Ms. Drake said that Moberly is much too small to host a committee meeting and there aren't any suitable cities nearby either.
- g. Member Survey: Mr. Arvidson summarized the results of the 2019 MRMTC Member Survey. Detailed results were included in the briefing folders. This survey is very important to the committee because it helps the staff identify what is working and what needs to be improved. For the first time in the committee's history, the member survey received a 100% response rate. The top two priorities identified by the survey were to continue the dialogue with the nuclear industry that has been started and to send state participants to transportation-related training(s). The survey did have some results that somewhat surprised the staff. First, having two committee meetings per year did not rank as a high priority. Second, committee members seemed indifferent to receiving a paper copy of the *Planning Guide*. Finally, some members believed the committee's website needs an upgrade. Ms. Janairo asked the committee for feedback regarding these three results.
- Mr. Gothard and Ms. Drake explained their thinking that two committee meetings per year is not unimportant, just that other priorities in the survey were a little more important to them. They both believe it is important to have a committee meeting that is separate from the NTSF Annual Meeting. Mr. Snee expressed that he used to think two meetings a year was overkill, but not anymore with the recent developments regarding industry shipments. Mr. Horn echoed Mr. Snee's comments and believe that two meetings per year are beneficial and suggested that members reach out to Ms. Janairo and the co-chairs if there are any specific topics that they would like to see covered. Mr. Schmidt expressed his support for two meetings a year, both because he finds them very informative and because it isn't always possible to attend both meetings so it's nice to have an option. Regarding the *Planning Guide*, Mr. Snee and Mr. Horn believes the committee should move to digital only because it is a modern world and because the paper copies are outdated rather quickly with membership and state staffing turnover. Through these discussions it was decided that the committee will continue to meet biannually, that future *Planning Guide* updates will only be online, and that options to upgrade the committee's website will be explored in 2020.
- h. Election of Co-Chair: Ms. Studer introduced the purpose and process of electing a co-chair to serve with her in 2020 and continue on as co-chair in 2021. Mr. Horn nominated Ms. Drake. Ms. Drake said she would be willing to serve and has gotten permission from

her agency. Mr. Gothard seconded Mr. Horn's nomination. By unanimous voice vote, Ms. Drake was elected as MRMTC Co-Chair for 2020-2021.

- i. Committee Work Group Assignments and Plans: There was only one new group to be assigned. Ms. Janairo sought those who would be willing to serve on a team that will review the DOE Order 460.2B when it is released. Mr. Snee and Angela Leek (Iowa) volunteered and will assist with the review.
- j. Spring 2020 Meeting: Ms. Janairo reminded the committee that they will be meeting in May 2020, in conjunction with the Annual NTSF Meeting. The MRMTC will have four to five hours to meet, and Ms. Janairo asked for topic ideas. Mr. Gothard asked if the committee could hear from the other company seeking a CISF license from the NRC, Holtec. Mr. Horn expressed the importance of continuing engagement with the nuclear industry, so he requested an update from NEI. Mr. Snee requested an update from Orano during and after the VY shipments to see how they are going and/or how they went. Ms. Janairo and Allan Barker (NRC) suggested getting an update from the Southwest Research Institute (SwRI) about the EISes for the proposed CISFs. Ms. Janairo also suggested a presentation on the Standard Contract and the practical implications to the shipping queue because of the OFF shipping model. Ms. Drake and Ms. Westra also echoed the request to have Holtec present, especially if they plan on shipping SNF by 2023. At this time, Mr. Blount reminded the group that the NTSF is a DOE entity, and while there is room for industry-centric topics, the focus must be on DOE shipments. Mr. Bertinaschi then asked about possible START training and further discussions on TEPP developments. Ms. Janairo said that she and the co-chairs would take all of these suggestions into consideration when building out the agenda for the Spring 2020 meeting. Finally, Ms. Janairo surveyed the room about possible locations for the Fall 2020 Meeting. Some consensus was formed around hosting the meeting in the Chicago suburbs with a possible tour of Argonne National Laboratory (ANL).

10. Regional Roundtable

- a. Illinois: Mr. Pitchford delivered Illinois' report. Illinois experienced 1,151 shipments this year, primarily coming from the decommissioning of Zion. This number will likely fall off next year. The state inspected and escorted 43 highway route-controlled quantity (HRCQ) shipments, three SNF shipments, and two WIPP shipments. Illinois tracked 18 category 1, non-HRCQ shipments. A new state draft rule dealing with water treatment residuals could lead to an increase in LLW shipments. An agreement with Idaho National Laboratory (INL) means 25 SNF rods will be shipped there from Byron Nuclear Power Plant. Decommissioning at Zion is quickly wrapping up and a transfer of the independent spent fuel storage installation (ISFSI) license to Exelon is scheduled for June 2020.
- b. Indiana: Ms. Studer delivered Indiana's report. Indiana continues to see several HRCQ shipments every year, about 35 in 2019. The state does not inspect these shipments because the states around them already do. They are planning on having four MERRTT trainings in 2020, two of which will be in the Indianapolis area. One of these will be a "train the trainer" training. Ms. Studer has made progress on engaging Tribes in Indiana and thanked Michael Bradley (Pokagon Band of Potawatomi Nation) for attending the meeting. She also thanked Brenda Tubbs (Indiana State Police) for coming and participating in the previous day's workshop.

- c. Iowa: Ms. Leek delivered Iowa's report. Iowa had five escorted shipments through the state, two of which happened in December. There would probably be more but most shippers route around Iowa to avoid paying associated fees. Duane Arnold Nuclear Power Plant in Palo, near Cedar Rapids, is shutting down at the end of 2020. When decommissioning begins, the site will enter SAFSTOR status for 30 to 40 years. Iowa is redoing its chemical and radiological nuclear plan and will train all local first responders about the new plan. Phil Meraz is aware of the state's tribal liaison(s) and will continue to work with them.
- d. Kansas: Swapan Saha delivered Kansas' report. Kansas has seen a few LLW shipments but has provided no escorts. Wolf Creek Nuclear Power Plant has renewed its license through 2045. A training exercise was scheduled for May, but flooding pushed it back to December.
- e. Michigan: Mr. Gothard delivered Michigan's report. Mr. Gothard's department underwent some reorganization and is now called the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The state conducted 47 level VI inspections of cobalt 60 shipments, some of which may be going through Ohio. One inspection led to the vehicle being taken out of service until it was repaired. The state passed two bills: one that defines "technologically enhanced naturally occurring radioactive material" (TENORM) and another that sets new fees for TENORM disposal. Palisades Nuclear Power Plant ceased operations on May 31, 2019, and the license was transferred from Entergy to Holtec on August 23. Holtec will accelerate decommissioning of the Palisades site and also gained ownership of the Big Rock Point (BRP) ISFSI in the process. Mr. Gothard's department wants to host a radiological operations support specialist training in 2020.
- f. Minnesota: Aaron Kallunki delivered Minnesota's report. Minnesota has had a couple dozen small HRCQ shipments but nothing outside of that. The state's two nuclear power plants have no plans to decommission anytime soon. Mr. Kallunki passed along information that former committee co-chair Kevin Leuer has retired and is farming near Green Bay, Wisconsin. Mr. Kallunki knows his department's tribal liaison and will pass his contact information onto Ms. Janairo.
- g. Missouri: Ms. Drake delivered Missouri's report. A reorganization put the state's Division of Energy back into the Department of Natural Resources (DNR). Ms. Drake noted that the number of HRCQ shipments increased to 32 shipments of 45 trucks this year after a dramatic drop-off in FY18. She noted that these shipments are mainly heading south to the southern U.S. or Mexico, and not Asia like they used to. Since July, there have been seven shipments of eight trucks. Fees for LLW shipments are \$125 per truck and Missouri made about \$55,000 last year and expects about \$60,000 this year. The state's one nuclear power plant just extended its license. There are a lot of DOE cleanup sites in Missouri that are nearing the completion of their mission. There are no tribal reservations in Missouri but there are ancestral lands and different agencies have different contacts that handle tribal related questions.
- h. Nebraska: James Rashilla delivered Nebraska's report. Nebraska had two WIPP shipments from ANL. Fort Calhoun Nuclear Power Plant has been in SAFSTOR since the Spring of 2017. The Fort Calhoun Board voted to accelerate decommissioning and they are estimating completion by 2028 as long as they can get a dry storage ISFSI up and running by 2022.

- i. North Dakota: Dale Patrick delivered North Dakota's report. North Dakota generally deals with just LLW and TENORM shipments. The state is a member of the Southwest Compact and generates about three cubic feet of radioactive waste per year, mostly from medical waste and the state's universities. That all goes to WCS. The Battelle borehole project was sent packing by the county of the proposed site. The company failed to get permission to drill in South Dakota as well. The state formed a legislative committee to explore the possibility of HLW disposal in North Dakota. Mr. Patrick testified to the committee. A HLW disposal site will likely not go forward.
- j. Ohio: Mr. Snee delivered Ohio's report. The Ohio Legislature passed House Bill 6, which will have drastic effects on the state's nuclear power industry. The original bill would assess a surcharge on every electric bill which would go to clean/carbon free energy providers, amounting to roughly \$200 million per year. However, payments to wind and solar energy providers were pulled out of the bill in committee along with some other subsidies. FirstEnergy, who runs the state's remaining nuclear power plants, will receive this money to keep said power plants running. Additionally, the state is dealing with the fallout from a 2017 DOE environmental report about the Portsmouth Gaseous Diffusion Plant in Piketon. The report states that small amounts of radiation were detected at a nearby middle school. A University of Northern Arizona researcher followed up on this report with his own saying there was enriched uranium in the middle school. The report also showed that there are no negative health impacts, and that only trace amounts were recorded. However, the school still shut down before the end of the school year, and it will not reopen next year. Over the Memorial Day weekend, DOE sent teams to the site to run tests. Activists filming the teams delayed some of the tests. DOE and the State of Ohio have now sent samples from the site to separate labs and are awaiting results. Despite the release numbers being far below hazardous levels and there being no major health concerns, the situation has turned into a public relations disaster. It has resulted in high-level shakeups and departures in the DOE Office of Environmental Management and lawsuits are being filed.
- k. Wisconsin: Adam Davenport and Mr. Schmidt delivered Wisconsin's report. Wisconsin has 11 Tribes that interface with the regional directors of Wisconsin Emergency Management (WEM). The state had six HRCQ shipments and eight non-HRCQ shipments in the past year. The state is having ongoing readiness trainings for any radiological issues that may come up. Dane County's radiological response plan is being revised and will be having a tabletop exercise in the first quarter of 2020. EnergySolutions recently announced that all physical decommissioning processes at the LaCrosse site have finished and it is just a matter of NRC processing the paperwork and transferring the license back to Dairyland Power. By law, the state is required to do environmental radiation monitoring around nuclear sites. They are required to do this for operating and decommissioned sites but could only charge a fee on operating sites. A recent change now assesses fees on decommissioning sites as well.
- l. Pokagon Band of Potawatomi Nation: As this was his first meeting, Mr. Bradley did not have anything to report.
- m. Oneida Nation: Daniel King delivered the Oneida Nation's report. He reported that several Wisconsin Tribes were upset that they were not notified of radioactive material shipments coming through their lands. It turns out that the shipments were just dry runs

along Highway 2 but he still had to do some damage control. Mr. King told them they shouldn't expect any shipments until 2023 and that he would have Ms. Janairo and an NRC representative come to inform them ahead of time. Mr. King spoke about Tribes applying to get their ancestral lands back and how that might affect shipping routes.

- n. Prairie Island Indian Community: Ms. Westra delivered Prairie Island Indian Community's report. She thanked the MRMTC for the invitation to attend the meeting. Ms. Westra reported that Prairie Island Nuclear Power Plant would like to expand its current ISFSI. She was able to travel to France with other tribal representatives to see Orano's SNF reprocessing facility at La Hague. She believes it would be a good study trip for legislators and other committee members.

11. Wrap-Up

- a. Review Action Items: Ms. Janairo reviewed the action items for the committee going forward. Those action items are captured below.
- b. Closing Remarks: Mr. Gothard thanked all the attendees for coming and adjourned the meeting.

12. Adjourn

ATTENDEES

Committee Members:

Christopher Boswell, Iowa
Adam Davenport, Wisconsin
Tiffany Drake, Missouri
Greg Gothard, Michigan
Kelly Horn, Illinois
Aaron Kallunki, Minnesota
Dale Patrick, North Dakota
Rodney Pitchford, Illinois
James Rashilla, Nebraska (for Sean Runge)
Swapan Saha, Kansas
Waylon Sanford, Michigan
Paul Schmidt, Wisconsin
Michael Snee, Ohio
Kaci Studer, Indiana

Other State Attendees:

Todd Armstrong, Illinois State Police
Steve Bertonschi, Ohio Emergency Management Agency
Robert Brown, Indianapolis Metro Police Department
Angie Cloutier, Indiana Department of Homeland Security
Keith Henke, Missouri Department of Health and Senior Services
Angela Leek, Iowa Department of Public Health
Stephen McLane, Missouri Department of Natural Resources
Phillip Meraz, Iowa Department of Transportation
Tad Rumas, Public Utilities Commission of Ohio
Brenda Tubbs, Indiana State Police
Michael White, Missouri Department of Transportation

Tribal Representatives:

Michael Bradley, Pokagon Band of Potawatomi Nation
Laurie Hernandez, Shoshone Bannock Tribes
Daniel King, Oneida Nation

Speakers:

Erica Bickford, U.S. Department of Energy (via telephone)
Ellen Edge, U.S. Department of Energy
Jeffery Isakson, Interim Storage Partners LLC
Fred Dilger, State of Nevada
Veena Gubbi, New Jersey Bureau of Nuclear Engineering
Rod McCullum, Nuclear Energy Institute
Kevin Moss, Western Governors Association
David Pstrak, U.S. Nuclear Regulatory Commission
Bobby St. John, Waste Isolation Pilot Plant
Mike Valenzano, Orano TN Americas
Christopher Wells, Southern States Energy Board
Heather Westra, Prairie Island Indian Community

Other Attendees:

Mitch Arvidson, CSG Midwest
Allan Barker, U.S. Nuclear Regulatory Commission
Demitrous Blount, U.S. Department of Energy
Patrick Brady, BNSF Railway
Nicolas Guibert, Orano TN Americas
Lisa Janairo, CSG Midwest
Miriam Juckett, Southwest Research Institute
Jeffrey Moore, Federal Railroad Administration
Tansey Moore, National Conference of State Legislatures
Cheryl Olson, Dairyland Power Cooperative
Brian Rude, Dairyland Power Cooperative

ACTION ITEMS

States and Tribes:

- All will mark calendars for the NTSF 2020 Meeting: May 18-21 in Scottsdale, Arizona
- All will mark calendars for the MRMTC Spring Meeting: May 19, 2020, in Scottsdale, Arizona
- All committee members will send tribal liaison information to Lisa as soon as possible
- All will work to get more people on the Stakeholder Tool for Assessing Radioactive Transportation (START) system
- All will work to give spent nuclear fuel (SNF) awareness training to local emergency responders
- All need to determine how they will protect safeguard information
- All need to understand county and local shipping regulations/government
- All must determine if railroads would allow them to do a rad inspection at a transload site or while a shipment is en route
- Tribes must declare/opt in if they want to receive advanced notifications of shipments
- Kaci Studer will send Lisa Janairo a copy of the DVD from the Fort Wayne Naval Nuclear Propulsion Program (NNPP) Exercise
- ✓ Heather Westra will send Lisa the Audit of Nuclear Regulatory Commission (NRC) Transitioning Process for Decommissioning document
- Tiffany Drake will serve as Co-Chair
- Tiffany will send Lisa the link for the Missouri Department of Transportation (DOT) tribal information website
- Mike Snee and Angela Leek will assist with the review of the newest version of what was formerly the Department of Energy (DOE) Radioactive Material Transportation Practices Manual
- All will send Lisa ideas for the MRMTC Spring 2020 and National Transportation Stakeholders Forum (NTSF) 2020 Meetings
-

Staff:

- ✓ Mitch Arvidson will post the [Kathleen Capstick/Homeland Security Funding White Paper](#) to the committee website
- ✓ Mitch will post [all presentations](#) to the committee website
- ✓ Mitch will complete a meeting summary and post it to the committee website
- Lisa and Mitch will prepare a Venn diagram comparing DOE vs. licensee shipments and lessons learned from the Transportation Tabletop Workshop on November 13
- Lisa and Mitch will plan to locate the Fall 2020 Meeting in the Chicago suburbs or in the rough vicinity of Moberly, Missouri, to attend the NNPP exercise
- ✓ Lisa will send the expense form to all eligible attendees
- Lisa will take session ideas from this meeting to the NTSF Agenda Planning Committee
- ✓ Lisa will help organize an NTSF or state regional groups (SRG) and Tribal Radioactive Materials Transportation Committee (TRMTC) group to review the new DEO Radioactive Material Transportation Practices Manual
- ✓ Mitch will add Jeff Isakson to the newsletter distribution list
- Lisa and Mitch will continue to plan for two committee meetings per year
- Lisa and Mitch will no longer plan for hard copies of the *Planning Guide for Shipments of Radioactive Material through the Midwestern States*, only an [online version](#)
- Lisa and Mitch will coordinate with the DOE Office of Nuclear Energy (NE) on their visit to Dresden Generating Station in Illinois in April or May

- ✓ Mitch will add important NRC links to the committee website (now in the summary)

Observers/Others:

- Mike Valenzano and Nicolas Guibert are encouraged to come back to future MRMTC meetings to provide updates on the Vermont Yankee shipping campaign