

**The Council of State Governments
Midwestern Radioactive Materials Transportation Committee**

**Proceedings of the Fall Meeting
December 6-7, 2011 Carlsbad, New Mexico**

Paul Schmidt (Wisconsin) called the meeting to order, welcomed attendees, and asked everyone to introduce themselves. Anne Clark with the New Mexico Radioactive Waste Consultation Task Force welcomed the group to New Mexico. Lisa Janairo (CSG Midwest) presented background information on the CSG Midwestern Radioactive Materials Transportation Project and the Midwestern Radioactive Materials Transportation Committee.

Mr. Schmidt provided a **report from the committee co-chairs**. From his perspective, the most significant activity was the meeting of the Blue Ribbon Commission on America's Nuclear Future (BRC), which took place on October 31 in Minneapolis. The meeting was well attended, there was media interest, and the legislative attendance was relative high. The two commissioners that attended appeared to be listening. Prior to the meeting, the committee had prepared comments on the draft report, which Mr. Schmidt previewed in his presentation at the meeting. He thought it was a positive sign that the commissioners were nodding their heads as he spoke. Mr. Schmidt was honored to represent the committee at the meeting and he thought it was a very good opportunity for the Midwest. Jon Schwarz (Nebraska) and Jane Beetem (Missouri) complimented Mr. Schmidt on his presentation at the BRC meeting.

Referring back to Ms. Janairo's "newcomers' orientation," Mr. Schmidt commented on the value of the committee. He said the Midwestern committee was very helpful to Wisconsin when the state had a shipment of research reactor spent fuel from the University of Wisconsin. Mr. Schmidt regarded the regional *Planning Guide for Shippers of Radioactive Materials through the Midwestern States* as "the bible" for the state's engagement in shipment planning. Tim Runyon (Illinois) added his perspective on the committee. He said, because of the combination of the committee's staff and members, the Midwest is the most active regional group and produces some of the best work.

Ms. Janairo provided a **project update**. Funding-wise, the project was in fairly good shape, largely because the Nuclear Regulatory Commission (NRC) had provided a small amount of new funding and the DOE Carlsbad Field Office (CBFO) had provided the project with all the project funding needed for the fiscal year. On the other hand, the DOE Office of Packaging and Transportation had not yet provided any new funding for the fiscal year and CSG Midwest would soon use up its carryover from FY11. As a result of the EM funding situation, Ms. Janairo had significantly scaled back on her activities related to the National Transportation Stakeholders Forum (NTSF). For example, CSG Midwest had hosted four NTSF webinars through September 2011 but would not be hosting any more until funding becomes available. Ms. Janairo had tried to fill in the gap by hosting two webinars with NRC funding. Ms. Janairo added that the region had received a small amount of funding over the summer from the BRC. Without that funding, the Midwest would not have been able to participate actively in the Minneapolis meeting.

With regard to information products, Ms. Janairo asked the states to send her updates to the state fees flyer as needed. She encouraged all committee members to become members of the Midwest's wiki site and offered assistance to anyone who needs it.

Mr. Runyon reported on the activities of the committee's **Integrated Spent Fuel Management work group**. Since the last meeting, the group had submitted two letters: one to the NRC commenting on the proposed rulemaking for physical protection of irradiated reactor spent fuel (10 CFR Part 73); and submitting comments on the draft report of the BRC. The latter addressed both transportation and storage of spent fuel. Earl Easton (NRC) added that the BRC had held a meeting the previous week and had posted a presentation on the website summing up the comments they have received at meetings and in letters. He thought the committee would be pleased with some of the statements in the presentation. Ms. Janairo said the final BRC report is due January 29. The NTSF intends to hold a webinar on the final report and Ms. Janairo hoped funding would be available for her to host it.

Mr. Runyon noted that funding issues could be a concern if the committee needs to start focusing more on storage and disposal. Participants discussed several issues related to funding. Ms. Janairo said the committee's two meetings per year were, in her opinion, the most important activities under the CSG Midwest project. Mr. Easton said the new NRC funding was intended to keep the states engaged in discussions related to spent fuel management. Mel Massaro (Federal Railroad Administration) suggested seeking funding from the U.S. Department of Transportation (DOT), especially if spent fuel shipments turn out to be likely in the near-term. Julia Schmitt (Nebraska) complimented the committee on its comments on 0561. Ms. Schmitt represents the Organization of Agreement States and Conference of Radiation Control Program Directors on the NRC's Radiation Source Security and Protection Task Force. One of the recommendations that made the 2010 report to Congress was related to trans-shipments. She was glad to see that the committee's comments were consistent with the recommendations.

Kelly Horn (Illinois) reported on the activities of the **National Transportation Stakeholders Forum (NTSF) Planning Committee**. He emphasized his desire to see the NTSF be "more global" – that is, involve not just DOE, but also DOT and the NRC. The Planning Committee had not yet identified a location for the 2012 NTSF meeting but would do so soon. Ms. Janairo handed out a copy of the draft NTSF agenda for discussion later in the day. The meeting will include regional meetings, plenary and breakout sessions, and a tour. Mr. Horn said he thought it would be useful if, when appropriate, the regions could speak with one voice about issues such as state involvement in DOE shipment planning.

Ms. Beetem reported on the **NTSF Communications Ad Hoc Working Group**. The group has been meeting since March 2010 and is hoping to wrap up its activities at the May 2012 meeting. One issue the group will wrestles with is whether DOE should have a single factsheet for all audiences or instead have different versions for different audiences. One of the group's accomplishments was a template for DOE factsheets, identifying all the elements that a useful factsheet should have. To test the template, a subgroup is revising an existing factsheet from a completed campaign. The group also hopes DOE programs will try out the template as a guide for factsheets for upcoming campaigns. The group is waiting to receive feedback from DOE on comments it submitted on the draft communications plan for the CBFO. The group had finished its review of DOE's "Answers to Your Questions" document and Ms. Janairo handed out the recommendations. Still in draft form is the "Key Messages" document, which Ms. Janairo handed out for discussion later.

Mr. Schwarz reported on the **NTSF Ad Hoc Working Group on the Waste Isolation Pilot Plant (WIPP) Security Communications**. The purpose of the working group is to help DOE communicate better with law enforcement and other state personnel on shipment-related security issues. The group will recommend revisions to WGA's security protocol and will also pilot test the new protocol. To date, the group has held one conference call to finalize the work plan. Another will take place before April after

the states have had a chance to collect security communications protocols from the states. A meeting of the working group will take place in February in Albuquerque. Recommendations from the group will be issued in April, followed by development of a tabletop exercise at a meeting in May (in conjunction with the NTSF meeting). In the summer or fall of 2012, the group would actually conduct the tabletop exercise. Mr. Schwarz requested that committee members send copies of the states' protocols to him and to Major Lance Evans (Iowa) for sharing with the working group.

Mr. Horn gave an update on the **Commercial Vehicle Safety Alliance's Level VI inspection program**. He said Larry Stern, the program manager, would be retiring in December 2012. Inspections of transuranic (TRU) waste trucks are voluntary. By regulation, any shipment of highway route-controlled quantity of radioactive material will have an inspection. In 2004-5, CVSA established the Peer Review Committee as a means of capturing best practices for the Level VI inspection program. It is not intended to be an auditing committee, but rather to help states identify ways to improve their programs. In the past eight years, peer reviews had been conducted in Tennessee, Colorado, Washington, New Mexico, Illinois, South Carolina, Idaho, and Michigan. The recent reviews of New Mexico's and Idaho's programs revealed that both programs were outstanding. He commented that Idaho does 500-700 inspections per year with 20 inspectors. Mr. Horn recommended visiting www.cvsa.org to find information on the Level VI program, including the peer reviews.

Melanie Rasmusson (Iowa) brought up a case in which a shipment blew a tire in Iowa. She asked whether the tire tread was part of the inspection and, if an inspector found a problem, could they order the carrier to change it. Major Evans is the Region 3 vice president of CVSA. He said that a new federal program makes any violation, citation, fine, etc., have a negative impact on a carrier's safety rating. As a result, carriers now have an incentive to challenge enforcement actions levied by the state inspectors. In the case Ms. Rasmusson had mentioned, the carrier wanted to complain about the action taken by the Iowa DOT officer. The three types of inspections typically conducted in Iowa are Level 3 (paperwork), Level 2 (all topside), and Level 1, which is comprehensive and involves the officer getting under the truck. The Iowa officer had conducted an inspection of a WIPP shipment and took an enforcement action against the carrier (out-of-service). The carrier was concerned that it would be disqualified from shipping to WIPP and asked Iowa DOT to reduce the enforcement action. Major Evans had refused. He predicted this type of situation will become more common as a result of the new federal program. Ms. Rasmusson said her concern was focused on whether the problem with the tire could have been anticipated. Mr. Horn said the truck had undergone a Level VI inspection in Illinois and the wear of the tread did not appear to have been a problem. Frank Moussa asked about the date for the shipment, and Major Evans said it happened in late August/September.

Mr. Schwarz mentioned that the WGA had developed a form for logging information on shipments that go into safe parking. Ms. Clark said she would share the form with Ms. Janairo in case the Midwestern states are interested in using it. She explained that the data collection will help WGA track the effects of bad weather on shipments and the need for safe parking. DOE had declined to do a study on this subject and would not provide funding for WGA to do a study. The best the West could do at this point was gather data, which is what led to the creation of the form.

Mr. Schmidt made an announcement about a recent posting on the BRC website. Specifically, the Midwest had urged the BRC to involve the states early and often, at the start of any potential shipping campaign, and to provide funding to states not just for training but to fund transportation safety programs. The BRC had issued a proposed key recommendation on transportation stating as follows: "Prompt initiation of programs to prepare for future large-scale transport of spent nuclear fuel and high-

level waste to consolidated storage and disposal facilities, including implementing transportation-related recommendations issued by the National Academies in 2006, undertaking planning activities with potentially affected states and tribes, and providing funding and technical assistance for related activities.” Mr. Schmidt thought this was a good outcome from the public comment process.

Following a period for nominations and discussion, the committee elected Major Evans to be the **new committee co-chair** in 2012-2013. Major Evans will serve as the junior co-chair in 2012, with Mr. Runyon as senior co-chair.

The committee launched into the **regional roundtable**. Mr. Schmidt invited all committee members to report on transportation-related activities within their states.

Illinois:

- The state will host CVSA Level VI training on June 18-21 in Springfield. If anyone needs training, please contact [Mr. Horn](#) or [Sgt. Todd Armstrong](#).
- On Thursday, December 1, Zion Nuclear Plant had shipped its reactor head. The shipment was considered low-level waste, LSA II. It was oversized and overweight, with a 22-axle trailer for a total length of 187 feet. The shipment transferred to rail at some point. It only traveled five miles in Illinois. The \$500,000 package was disposed along with the reactor head at the company’s disposal facility in Clive, Utah. Zion is technically not yet in the decommissioning mode, but getting close.
- Over the past year, Illinois inspected 100 shipments, including 50 point-of-origin inspections at Argonne National Laboratory and a few spent fuel shipments from the Missouri University Research Reactor. It has been awhile since the state has seen such a large number of shipments annually.

Indiana:

- The state is handing out personal radiation detectors to commercial vehicle enforcement inspectors.
- The Radiation Control Program is moving from the Department of Health to the Department of Homeland Security.
- The state does not currently have a fee for HRCQ shipments and discussions about imposing a fee on these shipments have been deferred.
- Ken Woodall with the IDHS is working on the state’s exercise with the DOE Naval Nuclear Propulsion Program, scheduled for 2013.

Iowa:

- Major Evans will be sending people to Illinois for the CVSA Level VI training. The state currently has six certified inspectors, but Major Evans would like to see that number grow to 12.
- All Level VI inspectors in the state have thermal imaging devices.
- Iowa has a good relationship with its agency counterparts in Illinois. Major Evans is trying to forge a good working relationship all along the I-80 corridor in Iowa. As part of this effort, he has been reaching out to Nebraska to ensure smooth and uneventful handoffs of shipments.
- On the subject of TRANSCOM training, Ms. Rasmusson said she had hoped to arrange for training in Iowa, but DOE has not yet provided it. Major Evans said he was working with Lisa Roback to schedule training in Carlsbad for some people from Iowa.

Kansas:

- The state had experienced 12 non-HRCQ shipments in the past year.

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- Two MERRTT trainings had taken place in Kansas.
- The Kansas Highway Patrol and Department of Transportation identified a few locations for safe parking in the state along I-70, I-35, and a state highway.
- Jennifer Clark had requested permission from the Adjutant General to use Department of Homeland Security funding to get new equipment for troopers. The request was denied, but Ms. Clark anticipated making a similar request in the future.

Minnesota:

- The state is continuing to see HRCQ shipments. Usually, on an annual basis, the state would have one or two shipments into destinations within the state. This year, nine shipments had passed through the state. The involved state agencies were discussing the security aspects of these shipments and had met with the FBI. The FBI will be working with other offices to monitor shipments that appeared to be following routes specifically to avoid fees. Mr. Leuer gave the FBI the last three years of data on shipments to use in putting together a situational awareness bulletin. The FBI will also share the advisory with DOT to look into whether shippers are using the shortest routes. The concern for the FBI is the duration of time that the shipments pose a target. Mr. Runyon said he would be able to provide information on all shipments that have passed through Illinois. Mr. Leuer will share Mr. Runyon's contact information with the FBI.
- The BRC meeting went very well. Mr. Leuer thought the breakout sessions were particularly useful.

Missouri:

- The Missouri Department of Transportation had issued a press release indicating that Missouri might make I-70 a toll road. Governor Nixon, however, responded to the press release by saying it would not happen.
- Missouri's fee went into effect in August 2009. Last year, HRCQ shipments started rolling through the state again. Ms. Beetem reported that funding from the fee revenue had helped the Highway Patrol replace equipment at inspection stations. The state fee fund has a \$300,000 cap.
- The week of December 5, DOE was sending TEPP trainers to Missouri to train 30-35 state agency staff. Next March, emergency response training would be conducted along the major routes in the state.
- The state agencies were working on an MOU for sharing the fee revenue. Soon, shippers would be able to use credit cards to pay payments for low-level waste shipments. Fees for spent fuel and HRCQ shipments will not be payable by credit card.

Nebraska:

- A risk communication course will take place in January in North Platte. The same course was offered in February 2011 and attracted 52 people. Ron Edmond from ORISE conducts the training. Mr. Schwarz said he had not received a single negative comment about the training.
- On February 8-10, MERRTT training would be offered in Omaha. Anyone interested in signing up can do so on the NEMA web site.
- Mr. Schwarz had sent a staffperson for training on TRANSCOM. She will now train all the duty officers.

Ohio:

- Michael Snee reported that the state had no issues with the WIPP shipments that had passed through in June. The hospital training along the routes was very well received and well attended.

The fact that the training took place after the Fukushima accident could have affected the attendance. The Department of Health has received a number of requests for additional training.

- Mr. Snee said there was little chance of Ohio's fee being revived.

Wisconsin:

- Most, if not all, Zion shipments will go through Wisconsin. Advance notification for the shipments is not required, but Mr. Schmidt said that – for the recent shipment of the reactor vessel head – notification would have helped avoid many problems. For example, the shipment was so large that street signs had to be removed in some places. Local law enforcement agencies were upset that they were not notified. The state was not notified either. Mr. Schmidt said the issue was the physical size, incredibly slow speed, and perceived risk of the shipment. He saw one article on the shipment. After the shipment was complete, the state had engaged in lessons learned discussions with the shipper. Teri Engelhart added that she learned about the shipment the afternoon before it took place. When she found out, she made the notifications to county sheriffs per protocol. But she realized they should have contacted the county departments of transportation. She would like to learn more about how the state DOT approves the routes for shipments. She added that, at one time the state had planned to have a committee on shipments, but dropped the idea when the frequency of shipments declined. Now, however, the agencies might revisit that plan.
- In discussions about who, at EnergySolutions, would be the best point of contact for further discussions, Mr. Massaro mentioned that EnergySolutions would be having a meeting in the spring in Reno.

Daniel Metlay reported on the activities of the **Nuclear Waste Technical Review Board**. The Board was charged with providing oversight of DOE's activities related to the Nuclear Waste Policy Act, including transportation and packaging. Over the years, the Board focused on the repository, but with Yucca Mountain having been canceled, it is currently involved in other activities, such as looking into DOE's Office of Nuclear Energy (NE) on fuel cycle research and development. The Board is also looking at what the DOE-EM program is doing to prepare spent fuel and high-level waste for disposal. If a storage facility is deemed to be the appropriate path forward, the Board will oversee the development of the facility and transportation to the site. Dr. Metlay also mentioned the Board's report on gaps in the data to support the long-term storage of spent fuel. Mr. Easton said there are actually four gap assessments either done or being done. Broadly, all four are reaching the same conclusions.

Frank Moussa (DOE-CBFO) gave the **report on WIPP activities**. He reflected fondly on his past roles as a member of the committee and as later as someone who oversaw the committee's cooperative agreement with the Office of Radioactive Waste Management (OCRWM). Dr. Moussa sent well wishes from Bill Mackie, who could not attend the meeting.

As of November 14, 2011, the CBFO had conducted 9,627 shipments of contact-handled (CH) waste and 531 shipments of remote-handled (RH) waste. Of the total shipments, 120 had originated at Argonne National Laboratory. Jodi Porter (New Mexico) asked why so few shipments had come from within New Mexico. Mike Brown (CBFO) said Sandia does not have much waste and all the CH waste was done. RH waste would go straight to WIPP once approval is received. Shipments from Los Alamos were limited by how many shipments could be loaded at the site's loading facility.

Dr. Moussa said shipments from the small quantity sites would be completed once Sandia National Laboratory finished shipping RH waste to WIPP in December/January. WIPP had received its first

shipment using the new TRUPACT III cask on August 26th. The TRUPACT III is not used for shipments through the Midwest. The CBFO plans to acquire a total of six TRUPACT IIIs through the end of April.

Dr. Moussa reviewed several incidents involving shipments that had taken place from May through September. Of particular note, on November 2, an empty RH 72-B cask was going to Oak Ridge National Laboratory when the driver made an improper lane change. Mike Brown (DOE-CBFO) said there were no fitness-for-duty issues with the driver, but the driver will no longer be driving for WIPP. Two route deviations is cause for removing a driver from the WIPP team. Exceptions are available for driving in big cities like Atlanta where merging can be difficult depending on the time of day. Mr. Brown said the WIPP contract allows for a safety bonus, but the bonus is reduced or even eliminated when violations occur. WIPP sees approximately 21-30 shipments per week or approximately 1,000 per year.

Dr. Moussa said some of the lessons learned from past WIPP shipments pointed to the potential value of having carriers obtain “turn-by-turn” navigation systems for tractors. In addition, carriers should consider videotaping all routes, including exit signs, and use the videos in driver training sessions.

In the WGA Biennial Review, the Western states had identified possible improvements regarding bad weather/road conditions and safe parking. The states requested that DOE allow sufficient time for trucks in safe parking to be released before dispatching new shipments. In addition, the Western states had recommended that DOE should communicate more frequently with the states when WIPP trucks enter or leave safe parking. Dr. Moussa said WIPP already tries to do both things but would be more vigilant. He encouraged the Midwestern states to let him know whether there were any situations in the Midwest regarding issues identified by WGA in its biennial review.

Dr. Moussa reviewed additional recommendations from the Western states. Ms. Clark clarified the issue raised with regard to medical training. She said the attendees generally are very sensitive to trainers having different workplace experiences. It would be an improvement to have medical training conducted by people with similar workplace experience (e.g., emergency room setting). Having similar experiences increases the likelihood that the trainers can share stories that will be salient for the people being trained. Marsha Beekman (Washington TRU Solutions) said two of the WIPP trainers have emergency medical technician experience. She was involved in the training that took place in Ohio, which Mr. Snee had mentioned was very well received. Ms. Clark emphasized that the issue was not credentialing, but rather teaching style.

Mr. Brown addressed a security incident that had happened in Wyoming. The tapes in the WIPP Central Monitoring Room make it clear that there was a communication issue. No one told the CMR explicitly what to do – e.g., “Stop the shipment.” The new NTSF ad hoc working group on the WIPP Security Communications Protocol was formed to improve communication between DOE, the states, and the drivers in such circumstances.

Looking ahead to 2012, Dr. Moussa said DOE was awaiting guidance from DOE Headquarters on the budget guidance document. The goal is to issue the guidance document early in the year and have it follow the recommendations of the NTSF Financial Guidance Ad Hoc Working Group.

On the subject of bad weather data collection, Dr. Moussa said DOE had not actively pursued this task because the M&O contract was being rebid. Once a new contract is awarded, DOE will consider making a “change order” and task the contractor with collecting data. He encouraged the states to collect their own data, compile it, and pass it on to the CBFO.

The WIPP transportation plan was completed and distributed to the states in early August. Dr. Moussa said the CBFO would be putting out a call for changes in early 2012. The Strategic Communications Plan, referred to earlier, is still in the works. DOE will provide the states with a courtesy copy when the plan is finalized. Revised fact sheets are also in the works.

Mr. Brown reported on the shipment with the blown tire discussed earlier in the day. The shipment had undergone a very thorough point-of-origin inspection at Argonne. In Iowa, when the truck stopped for a 150-mile check, the driver identified a problem with the tire and reported that the tread had passed the CVSA inspection in Illinois. The truck was then put out of service for a tire change. There was a difference of opinion as to who was at fault. The carrier felt that the driver self-identified the need for a tire change and the shipment should have been re-inspected after the tire change. Such information is now tracked on a monthly basis, with carriers providing a monthly report on all incidents involving trucks placed out-of-service. A carrier's performance could influence its continuing service on WIPP shipments.

Ms. Beekman reported on **WIPP Training**. WIPP had trained 1,105 responders in 2011. A total of 15 Medical Management training sessions were completed over a four-month period, the vast majority of which were in Ohio. She mentioned that MERRTT training and WIPP training are one and the same – the only difference being that the latter includes information specifically on WIPP and its purpose. Ms. Beekman explained that WIPP teaches the MERRTT course but EM has the responsibility for modifying the content.

In all, WIPP has three instructors: Ms. Beekman, Ron Macaluso, and David Lewis. Each trainer has more than 20 years of emergency response experience. The Medical Management training, "Radiological Training for Hospital Personnel," is accredited by the Emergency Nurses Association, American Society of Radiologic Technologists, and Continuing Education Coordinating Board of Emergency Medical Services. A class for coroners is being reviewed and revised and should be ready in February 2012. The Dirty Bomb class previously offered through the New Mexico State University/Carlsbad is no longer available.

A WIPPTREX is scheduled in Georgia in 2012. Personnel from other states may attend. Mr. Brown said he would check to see whether it is allowable to use WIPP agreement money to pay for time and travel associated with observing a WIPPTREX. Ms. Beekman encouraged the Midwestern states to let her know what their training needs are. On average, WIPP training has 13 people per class. Ms. Beekman would like to see that number grow to 20 to make the sessions more cost effective.

Via telephone, Ms. McNeil provided an **update on DOE packaging and transportation activities**.

The funding outlook for DOE in 2012 was "challenging." All programs within DOE were affected, and all faced potentially significant reductions in funding.

Waste Management priorities for DOE include continuing to manage inventories in a manner that is safe and complies with applicable laws and regulations. One benefit of budget cuts was that everyone within DOE was working more closely together than previously. Ms. McNeil showed maps of the sites involved in EM's efforts to treat radioactive tank waste, store spent fuel, and dispose of transuranic, mixed, and low-level radioactive waste. Forecasts for the latter two showed that levels in FY15 would be less than a third of what they were in FY10-11, when ARRA funding was available. With regard to spent fuel, DOE-NE would take over the spent fuel at Idaho National Laboratory to support its research and development

efforts. The program was awaiting the release of the BRC recommendations before deciding how to manage spent fuel and high-level waste at Savannah River Site. EM has made a great deal of progress since its inception in 1989, with the DOE complex shrinking from 110 active sites to 17 sites in 11 states.

Ms. McNeil said there were no reportable incidents involving EM shipments in the past year, and WIPP had only two.

The NTSF is planning to meet in the South during the week of May 15. More details will be available in the coming month. Ms. McNeil encouraged people to check out the [NTSF wiki site](#), which houses information on all the meetings, working group activities, and webinars sponsored by the NTSF.

Tom Clawson provided a **report on the Transportation Emergency Preparedness Program (TEPP)**. A total of 71 TEPP classes were delivered with assistance of the TEPP Central Operations. In addition, WIPP had conducted 36 classes and the states had held 17 classes. The budget cut earlier in the year cut down on the number of people trained in 2011 compared to other years (1,856 in FY11 compared to 3,241 in FY10).

On the subject of TEPP external partnerships, Mr. Clawson reported that the [FEMA Q&A booklet](#) had at last been finalized. The Midwestern states had contributed comments on two drafts of the booklet in recent years.

TEPP is trying to use live sources at exercises. In October 2011, an exercise at the Louisville Fire Training Academy (Kentucky) simulated an accident involving a train and a van carrying radioactive sources. With the live sources, dose rate readings taken during the exercise were not simulated, but decontamination readings in the decon corridor were.

Mr. Clawson reminded the states that TEPP will provide hospital training if the states request it. TEPP recently worked with FEMA to update the G-346 hospital course. TEPP had partnered with the Region 6 RAP team to conduct a Radiation Specialist Training course. The program was working on scheduling a course in Boulder, Colorado, on Jun 11-15.

Mr. Easton reported on **NRC activities**.

Funding: The NRC had earmarked \$200,000 for the regions, with equal funding provided to each group. The funding would be accessible to the regions through their existing cooperative agreements with DOE. Mr. Easton said the decision to fund the regions is the NRC's recognition that these groups have value and need to remain intact.

Rulemaking: The Midwest submitted comment letters on the NRC's proposed rule and guidance document for the physical protection of irradiated reactor fuel. It was Mr. Easton's hope that a session at the NTSF meeting would give the NRC and the states an opportunity to discuss how regional input was incorporated.

Upcoming meetings: Mr. Easton reported on the agenda for the INMS meeting, which would address spent fuel storage and transportation. On Day 1, the agenda included the BRC report and information about the Fukushima accident. Mr. Easton said he would send the agenda to Ms. Janairo for distribution to the states.

Yucca Mountain licensing update: Technically, DOE cannot withdraw the application because the Atomic Safety and Licensing Board (ASLB) found the department did not have the authority to do so. The Commissioners voted 2 to 2, with one abstention, on the question of whether to overturn the ASLB's decision. Because the vote was tied, the decision was not overturned. In the end, though, the NRC shut down the licensing review because the agency does not have any money to cover the costs associated with continuing the review. DOE had already dismantled its review team, and now the NRC is in the process of doing the same.

Dr. Metlay added that the question of whether DOE can withdraw the application is now before the courts, with a decision expected in the spring. Mr. Easton said the real issue was whether the NRC had violated the Nuclear Waste Policy Act (NWPA) by not completing its review on time. The NWPA required the review to be conducted within three years. The license application was submitted on September 8, 2008, therefore the review should have been completed by this past September. The question was whether the failure to meet that deadline was due to a policy decision or a budgetary decision. The NRC maintained it was the latter.

Dry storage: In 2010, two thirds of the spent fuel in storage will be in wet storage. Dry storage used to be a stop-gap measure, but now it is the default for most plants. The growth curve of spent fuel in storage shows that, when Yucca Mountain failed to open, everything went into dry storage. Mr. Runyon wondered what impact the lack of cask standardization would have on the costs of a regional storage facility.

Private Fuel Storage (PFS): Mr. Easton reminded the members that PFS has an NRC-approved license. What stopped the facility from operating was the Bureau of Indian Affairs' decision to deny the lease approval and the Bureau of Land Management's denial of the right-of-way for a rail line to the site. The Skull Valley Band of Goshute Indians challenged the two agencies' actions in court, and in July 2010 the U.S. District Court for Utah remanded the decisions to the Department of Interior for reconsideration. DOI has been reconsidering the decisions since that time.

Mr. Easton said the NRC already has in place a regulatory regime for long-term storage of spent fuel. But the licensees need to have an aging plan for the spent fuel, specifying, for example, how and how often the casks would be monitored, and any maintenance and corrective actions that would be taken (and when).

With near-term storage transitioning to long-term storage, Mr. Easton saw an opportunity for the states to get more involved in NRC-related activities. He explained that there are two types of casks: dual-purpose casks, and storage-only casks that involve sealing spent fuel inside a canister and using concrete overpacks for storage and transportation. Putting spent fuel in a cask typically cost \$2 million – \$1 million to purchase the cask and another \$1 million to load it. The NRC is gearing up to prepare an environmental impact statement to support the Waste Confidence decision and as part of that is looking more deeply at whether it will be necessary to change the regulatory basis for extended storage of spent fuel beyond 120 years. The commission has determined that storage for 120 years was safe. That timeframe represents 40 years for the initial operating license, plus a 20-year extension and 60 years of storage beyond that. Mr. Easton encouraged the states to participate in the webinars CSG Midwest would be hosting on December 13-14.

Representative Cathrynn Brown addressed the committee. She is married to WIPP's Mike Brown and has lived in Carlsbad for 25 years. Rep. Brown said she appreciates the work that many of the attendees

do and she thanked them for doing it. She does not think the general public understands the thoughtfulness and the science and engineering that goes into transporting radioactive materials. Part of her job as a legislator is to educate. She said the people of Carlsbad are fairly well-educated on this topic, but it has been a decades-long process. She thinks New Mexico does not understand the value of the WIPP site. Rep. Brown is optimistic about the future of nuclear energy. She regards WIPP as a success story after 12 years of safe operation and is proud to represent the district that houses WIPP.

John Waters, Executive Director of the Carlsbad Department of Development (CDOD), presented information on the community's experience as a host site. The history behind WIPP is long, going back to a 1957 study by the National Academy of Sciences. In 1968, a site in Lyons, Kansas, was under consideration, but the state said, "no." In 1971, New Mexico State Senator Joe Gant pursued a site at WIPP for disposal of radioactive waste in salt. By 1988, the site was ready to go, but it had to wait 10 years until all the lawsuits over its operation were concluded. Mr. Waters said the people of Carlsbad are proud of the success story that is WIPP.

The waste disposed at WIPP results from the Cold War. Salt is the reason WIPP is located in Carlsbad. It is geologically stable, lacks water, and is easy to mine. Mr. Waters said the salt mined in Carlsbad contains potassium and is used in fertilizer. The major consumer is the Midwest, but it is also shipped to China and India and other countries. Salt is plastic and flows, which makes fractures self healing. WIPP is mined into the Salado formation at about 2150 feet below ground.

Ninety-six percent of the waste allowed at WIPP is contact-handled or CH waste. The remaining waste can be remote-handled, or RH waste. Originally, WIPP was ready to open in 1988, but DOE spent a decade fighting lawsuits, some initiated by New Mexico. The first shipment arrived on March 26, 1999. Rocky Flats in Colorado made its last shipment to WIPP in 2005 and, because of WIPP, Rocky Flats was able to close and the site was remediated. Mr. Waters highlighted some aspects of the WIPP transportation program, including the high standards for drivers. He said that, since 1988, more than 30,000 first responders have been trained in New Mexico and along the shipping routes. At the federal level, the EPA certifies WIPP. In the state, the New Mexico Environment Department issues the permit required for disposal of mixed transuranic waste.

DOE expected the site to operate through 2034. Now, however, it was expected to cease operation in 2015-2016 because the DOE sites are cleaning up their TRU waste so quickly. Three sites have already been cleared of their transuranic waste inventory. With the end of WIPP operations on the horizon, the Carlsbad area is looking at ways to expand nuclear activities. One activity of interest is to store spent fuel. The CDOD is moving forward with developing an interim storage site halfway between Carlsbad and Hobbs. Mr. Waters said the CDOD was not sure what technology a storage site would use, but is looking at several options for dry storage. The Eddy Lea Energy Alliance (ELEA) had 1,000 acres of land previously characterized for the DOE Global Nuclear Energy Partnership (GNEP) program. The site is about seven miles from WIPP. The infrastructure is present, including rail access. Mr. Waters considered the operation of a storage facility as "doable in the short term." The CDOD issued a request for inquiries and, of the 11 responses received, eight were acceptable.

One question the CDOD is considering is whether to co-mingle defense and nondefense waste. The site, if built, would be a private facility, not owned by DOE. Mr. Waters mentioned that ELEA is sponsoring a [National Nuclear Fuel Cycle Summit](#) in Carlsbad on April 2-5. The summit will include tours of WIPP and of the LES facility.

The committee resumed its **business session**.

Communications ad hoc working group: The committee discussed the draft items from the working group. Ms. Janairo asked members to send her any comments before December 20.

NTSF meeting: Mr. Horn suggested having a session on the Pipeline and Hazardous Materials Safety Administration (PHMSA) harmonization of DOT regulations with IAEA requirements. Mr. Easton suggested the states needed to get their input to PHMSA and the NRC before the agencies go to Vienna. It is at that meeting that the IAEA requirements are set. Mr. Horn volunteered to work with Mr. Easton to put together a breakout session on harmonization. Ms. Janairo said one outcome from the session could be recommendations for how to improve the stakeholder engagement process so that input from the states would be considered up front, before preliminary decisions are made.

Other suggestions for agenda topics included an update from the Blue Ribbon Commission on America's Nuclear Future. Ms. Janairo said originally the NTSF had intended to conduct a webinar on this topic. A presentation in person would be fine, too, if the webinar did not work out.

Regarding DOE shipment updates on the NTSF agenda, the states agreed that the key pieces of information they needed were a map of routes, list of carriers, DOE point of contact, and specifics regarding shipment numbers. Ms. Janairo said she and Mr. Horn would suggest that all DOE speakers be asked to include a slide in their presentation to relay this information. The members agreed that the lessons learned panels from previous meetings could be dropped from this year's agenda.

Other topics of interest to the states included an overview of DOE's Motor Carrier Evaluation Program and the minimum requirements to be a carrier. Also, some states were interested information on how to select an alternative route. Ms. Janairo said she had seen Jay Thornton from Iowa give a presentation on this topic. In addition, Carlisle Smith from Ohio and former committee member Thor Strong from Michigan had teamed up on a presentation in connection with an alternate route for University of Michigan spent fuel shipments.

New projects: Ms. Janairo mentioned that, with the NRC funding, the committee would be able to devote more time to issues related to storage. Mr. Runyon had suggested awhile back that it might be a good idea to revise and update the Midwest's Report on Interim Storage. The staff used to publish this report on a fairly regular basis back when dry storage was a new phenomenon. Ms. Janairo will track down an electronic copy of the report and circulate it among the committee members to see whether the states might have an interest in an updated report. Mr. Schmidt agreed to continue to serve on the Integrated Spent Fuel Management work group.

Mr. Schmidt adjourned the meeting at 5:15 p.m.