

**The Council of State Governments
Midwestern High-Level Radioactive Waste Committee**

Proceedings of the 22nd Meeting

**Madison, Wisconsin
October 23-24, 2000**

Welcome and Introductions

Ms. Lisa Sattler (CSG-MW) convened the meeting at 3:40 p.m. She welcomed everyone to the 22nd Meeting of the Midwestern High-Level Radioactive Waste Committee. She explained that Mr. Frank Moussa (Kansas), the committee chair, would not be able to attend the meeting due to the recent birth of his son. Mr. Tim Runyon (Illinois), the committee vice chair, would preside over the meeting once he arrived. Ms. Christine Bacon (Wisconsin) welcomed the group to the Wisconsin and encouraged everyone to visit the newly renovated state capitol.

Committee Business Session

Project Update: After general introductions, Ms. Sattler highlighted some of the recent activities of CSG's Midwestern High-Level Radioactive Waste Transportation Project. She had begun drafting a "planning guide" that would identify the Midwestern states' preferred practices for shippers conducting shipments of spent nuclear fuel, high-level radioactive waste, and transuranic waste through the region. In contrast, the guides prepared by the Western Governors' Association (WGA) and the Southern States Energy Board (SSEB) apply only to the U.S. Department of Energy's (DOE) transuranic (TRU) waste shipments to the Waste Isolation Pilot Plant (WIPP). Ms. Sattler will distribute the draft guide for committee review in several installments. Mr. David Crose (Indiana) volunteered to work with Ms. Sattler to develop the planning guide.

Ms. Sattler will compile updated information on all the Midwestern state points of contact, emergency response plans, relevant statutes and regulations, and various other subjects. She would distribute a draft of this information to each of the states for their review and comment. Her goal was to complete the first draft of the Midwestern planning guide in time for discussion at the committee's spring meeting, with the final to be completed during the summer of 2001. WGA and SSEB had entered into memoranda of agreement with the Secretary of Energy to endorse their regional planning guides. Ms. Sattler said the Midwestern states could do the same, if the committee were interested. She added that seeking a memorandum of agreement between the Midwestern Governors' Conference and the Secretary of Energy might be a good way to reach out to the new secretary.

Mr. Kevin Blackwell (FRA) observed that it would be useful if the regional groups brought their planning guides into harmony with one another. Ms. Sattler said that was an excellent idea for an agenda item at the upcoming joint meeting of the regional groups.

Transportation External Coordination Working Group and Topic Groups: The last meeting of the TEC/WG was in Indianapolis on July 25-27, 2000. Several representatives of the Midwestern states attended the meeting.

Protocols: The internal and external review of the protocols was complete. The DOE writing group was putting the finishing touches on the protocols as well as developing introductory “umbrella language” that would explain the purpose of the protocols. In mid-November, Ms. Sattler would receive the draft introductory language from DOE and would distribute it for comment. The next topic group conference call was scheduled for November 29.

Ms. Holm added that DOE was revising DOE Order 460.2. It was possible the protocols would be a manual for the order. Ms. Sattler asked if there was any opportunity for external review of the protocols, and Ms. Holm said there was not. She said the orders were for internal DOE guidance. Mr. Runyon noted that DOE Orders often do not match NRC regulations, which creates confusion among the regulators in the states.

Training/Medical Training: Mr. Don Flater (Iowa) deferred to Mr. Robert Owen (Ohio). Mr. Owen said the group had held a teleconference to address two key issues. First, they discussed how to portray the Transportation Emergency Preparedness Program (TEPP) modules (called “MERRTT”) to fire departments — the preference at this point was to prepare a video. Second, the group was looking at decontamination procedures. Mr. Owen said there seemed to be a number of existing procedures, so it should just be a matter of pulling it together. In response to a question from Ms. Sattler, Ms. Ella McNeil (DOE) said DOE was working to consolidate all its training programs. The WIPP State and Tribal Education Program (STEP) was looking at ways to merge with the TEPP modules. Under the WIPP Land Withdrawal Act, the WIPP training must be certified by OSHA. DOE was hoping to modify the modules to make them eight-hour, user-friendly courses covering all DOE shipments. Mr. Ralph Smith (DOE-CBFO) said four of the modules had already been revised.

Ms. Sattler asked to what extent the training topic group would have input into the rewriting process. Ms. McNeill said the topic group would be involved. She added that, at the request of the topic group, DOE was also looking at offering continuing education credits with the training modules.

Ms. McNeill said DOE would hold a meeting on November 16-17 in Albuquerque to discuss the merger of the STEP and MERRTT training. Mr. Crose cautioned that the states had invested a great deal of time in reviewing and now using the MERRTT modules. Ms. McNeill said DOE would proceed with caution when making changes to the modules.

Mr. Thor Strong (Michigan) asked what the final product would look like. Ms. McNeill said the states would receive a revised CD-ROM, probably with annual updates. Mr. Smith added that the basic training would not change, but other packagings would be covered. He reiterated that, after the modules have been revised, DOE would seek OSHA certification. The CBFO would continue to conduct training because it is required under the WIPP Land Withdrawal Act: training must be delivered to all the states through which shipments pass. The training would cover awareness-level, operations/technician level, and medical training. Training was also available for all the major instruments. The Land Withdrawal Act referred specifically to shipments “to or from WIPP;” however, WGA passed a policy in June saying all TRU waste shipments should be treated like WIPP shipments. Mr. Smith added that he had spoken with Mr. Oba Vincent and Mr. Thomas Baillieul (both with DOE) about conducting their TRU waste shipments in compliance with the WIPP protocols. They had agreed to do so to the extent practicable.

Mr. Strong asked about the controversy surrounding DOE's request to OSHA for a waiver for the MERRTT modules. Specifically, HAMMER had requested a waiver of the requirement that responders not enter a hot zone to effect a rescue. Ms. McNeill said HAMMER had withdrawn its request for a waiver. The members of the training topic group said that some states allow entry in such situations, whereas others do not. This is the reason for arranging the modules in "blocks:" one block would apply if the state allowed entry, another block would apply if entry were not allowed. Ms. McNeill added that entering the hot zone to do life saving is consistent with the North American Emergency Response Guide.

Communications: Ms. Sattler said the topic group had held a conference call on September 28. The group was beginning to work on the National Transportation Program website redesign. In addition Sandia National Laboratory was working on a packaging website, which the topic group would review. Other items undergoing review and/or development included fact sheets, the TEC/WG site, a National Safety Council brochure on low-level waste, a presentation for local governments, and a risk communication package. Ms. Sattler would send out these items for the committee to review. Ms. Sattler said she had requested that DOE prepare "quick facts" sheets on the OHOX railcar and the CNS 10-160B container, which would be used to transport transuranic waste from sites in Ohio.

Consolidated Grants: Mr. Strong said the Indianapolis meeting had a fairly lively discussion of the consolidated grant issue. He observed that there seemed to be general support for the grants, but there was disagreement over how (and how fast) to implement them. He said some of the potential key factors for allocating funding included population, mileage, even changes in elevation. The Indian tribes were most interested in basing funding awards on existing resources. There was also a great deal of discussion of eligible activities. Mr. Strong said entities that currently receive funding were worried about losing what they already have.

Mr. Crose said he thought the number of shipments, miles, and population were the most important factors for allocating funding under a proposed DOE consolidated grant program. He reviewed some of the features of the DOT's Hazardous Materials Emergency Preparedness (HMEP) program. The HMEP grants provide funding for planning and training, but not for equipment. The training and planning portions of the grant have different allocation factors, which include population, number of highway miles, number of hazardous materials truck shipment miles, and the number of chemical facilities. Mr. Owen asked how HMEP would be folded into the consolidated grants, and Mr. Crose said that would be up to each state.

Ms. Holm spoke briefly about DOE's reasons for considering a consolidated grant approach. She said the Senior Executive Transportation Forum strongly supported the concept of consolidated funding, if not any particular approach. Mr. Smith noted that the WIPP program was governed by the WIPP Land Withdrawal Act. He said the program had commitments to states on the WIPP corridors to provide funding. He did not want to see those funding levels reduced under a consolidated grant approach. He also said he was in favor of consolidated funding, but he did not think a grant would be the appropriate vehicle. Mr. Ron Ross (WGA) said WGA had sent a letter to the Secretary of Energy supporting the concept but not the current approach. He said the governors thought DOE needed to dedicate enough money to the grants to make the system work for everybody. Their principal concern is the loss of the regional groups and the regional perspective. The Western states have told DOE very strongly that they want the

regional group to administer the money, because it will force the states to come together and be “good neighbors.”

Mr. Runyon observed that, since the very beginning, the consolidated grant discussions seem to have been bogged down by tribal issues. Ms. Holm said the tribes have a number of difficult issues to resolve. She said the suggestion had been made to have separate topic groups address tribal issues related to funding and state issues. The tribes preferred to continue working in conjunction with the states, however. Mr. Runyon reiterated that, because the tribal issues are so different from the state ones, separate groups should work to resolve them. He also observed that, from what Ms. Holm had said, it appeared the grant program was not moving forward as rapidly as the states had feared.

Mr. Runyon said preferences for implementing the grants appeared to be regional. He suggested the Midwestern region might want to work as a group to develop a unified position on implementation factors. Mr. Runyon asked if all the DOE programs were on board with the concept. Ms. Holm said the programs with unclassified shipments represented on the DOE Senior Executive Transportation Forum were all committed to participating. Mr. David Huizenga, chair of the Forum, was in favor of DOE allocating additional funding for the consolidated grants.

Ms. Holm suggested waiting to develop a regional position until DOE’s draft implementation plan becomes available. She said the implementation plan would describe how to implement the *process* for developing the grant, not how to implement the grants themselves. She said developing the grants would take around 12-18 months. The current proposal was for 10 percent of the funding to go to the tribes. The total amount being considered was \$10 million.

Mr. Crose noted that the nationwide HMEP program is administered by three people, and the grants go directly to the state. Mr. Smith said that the WIPP program maintains a separate budget for the regional groups and for the state funding. He emphasized that funding for the regional groups would not affect the amount available to the states. Ms. Sattler clarified that there is a cost associated with administering the agreements with the states; the cost is small, however, and is included in the CSG budget, not taken out of the states’ funding. She also noted that CSG did not have a preference for how the Midwestern states would receive their funding under the consolidated grants. She said CSG would administer the grants if the states so choose. Direct funding from DOE to the states was also an option.

National Research Council Board Meeting: Mr. Runyon said Mr. Strong had been invited to speak at a joint meeting of the National Research Council Board on Radioactive Waste Management and Transportation Research Board. Mr. Strong explained that the boards held the meeting mainly for the purpose of learning about the issues related to transporting spent nuclear fuel, not necessarily all radioactive materials. The agenda included presentations by the International Atomic Energy Agency, DOE-OCRWM, the Nuclear Energy Institute, Private Fuel Storage, Ltd., and the State of Nevada.

Mr. Strong said his presentation started with an overview of the state of Michigan’s recent experience with a DOE shipment — namely, the MOX fuel shipment that took place in December 1999. He highlighted this shipment as a “lesson learned” in what *not* to do when shipping radioactive materials. He told the boards that the states want a) to be kept informed and

involved in the decision making process, and b) to feel prepared to handle shipments of radioactive materials, in general, but particularly spent nuclear fuel.

In terms of being informed and involved, Mr. Strong had mentioned institutional mechanisms such as the cooperative-agreement groups. He had also addressed the letter of consensus that the four regional groups prepared in 1998. He highlighted the importance of transportation planning, noting that state needs and perspectives on shipments of radioactive materials were identical for spent fuel, high-level waste, and transuranic waste. The states also would like to see greater consistency in how the different DOE programs conduct their shipments.

States have different ideas for how to prepare for shipments. In Illinois, for instance, the state inspects and escorts shipments. Other states have not chosen this approach. The things the states have in common, though, are a need for sufficient training, funding to cover that training, and adequate lead time to conduct the training. Mr. Strong had also mentioned legislative activity in the states, and federal developments such as the DOE transportation protocols.

On the subject of public reaction, Mr. Strong said the states are caught in the middle. On the one hand, the states want to see the material shipped safely, and would like to help provide the proper perspective on the risks associated with radioactive materials transport. On the other hand, the states need to be sensitive to the concerns of the public regarding shipments. Mr. Strong said the presentation went well, but he did not know what the boards planned to do with the information they had gathered.

TRANSCOM Steering Group Report: Mr. Runyon represented the committee on the TRANSCOM Steering Group. DOE tracked several dozen shipments in FY 00. Mr. George Johns (Iowa) represented the Midwest at the beta testing of the new system in August. Several discrepancies were identified during the test. In addition, the participants also identified some desirable improvements. DOE was working to fix all the discrepancies and change the software as requested and as funding would permit.

One of the issues identified was the need for greater system security, especially in light of some recent security lapses within the DOE complex. DOE was developing a security plan. In addition, the Nuclear Regulatory Commission (NRC) was examining the system to see if it would meet their requirements for safeguarding information. An independent contractor was performing a verification and validation for DOE, which should be completed in November.

DOE had transferred TRANSCOM operations from Oak Ridge to Albuquerque. Ms. Sattler asked if the NRC had approved of the current system, and Ms. Holm said DOE had not asked for NRC approval of the existing system.

The tentative implementation schedule called for DOE to have an approved security plan by November 2000. Both the existing system and TRANSCOM 2000 were scheduled to be running in December 2000, with user training on TRANSCOM 2000 scheduled to begin in January 2001. Hands-on training would be required in order for users to gain access to the system. Tentative locations for training courses were Salt Lake City, Harrisburg, Albuquerque, and Springfield.

Mr. Runyon reviewed the software change request process. Users should contact the TRANSCOM Steering Group representative to identify areas for improvement — either problems with the system or suggested enhancements. The Steering Group would help DOE to

prioritize the suggestions. Afterwards, DOE would conduct a feasibility and cost review, and make the appropriate changes.

Ms. Holm said the February TEC/WG meeting would include an update on TRANSCOM 2000 as well as a demonstration of the new system. Mr. Runyon said the training would likely consist of a three-four hour course, with two held in one day. Mr. Strong asked to what extent current users were being kept up to date on the development of the new system. Mr. Runyon said the updates at the regional and TEC/WG meetings served that purpose. Mr. Runyon said he did not know the computer requirements for TRANSCOM 2000.

Upcoming meetings: The committee voted to hold its next meeting on June 5-6 in Idaho Falls, Idaho. The meeting will include a tour of the Idaho National Engineering and Environmental Laboratory (INEEL). Mr. Runyon announced that SSEB had agreed to host the third joint meeting of the regional groups. The Midwest hosted the first meeting in Chicago in 1995, and the Western region hosted the second meeting in Las Vegas in 1997. Ms. Sattler said the goal was to have the meeting in October-November 2001. Mr. Christopher Wells (SSEB) said the SSEB staff was looking at possible meeting locations in the South. Mr. Runyon asked committee members to direct their suggestions for joint meeting speakers and agenda items to Ms. Sattler.

U.S. Department of Energy National Transportation Program (NTP) Update, Part I: DOE's Baseline Disposition Studies

Mr. Rick Fawcett (INEEL) said his group provides the analysis for DOE's integration activities, including projected waste volumes and numbers of shipments. DOE has recently started looking at ways to improve information on the impact of waste flows on the different DOE regions. The CSG-MW region includes all the states DOE Region 5, plus Kansas and Missouri. NTP-Idaho was working with the TEPP program and NTP-Albuquerque to provide the states specific information on historical as well as projected shipments. In addition, NTP would work with WIPP to make sure both programs are using the same data.

Mr. Fawcett showed a sample baseline disposition map, which identified where the material currently resides, plus proposed treatment and disposal steps. The disposition maps are finished for all the waste streams in the Environmental Management (EM) side of DOE. DOE was trying develop these maps for the material streams throughout the department. One difficulty, though, is that much of this information is classified. DOE was looking at options for presenting volume and shipment information in a way that could be unclassified.

The data elements that DOE is seeking to refine and make consistent include material category, package type, package capacity, mode, number of packages, and number of shipments. For planning assumptions, the rule of thumb is that a single 18-wheeler truckload constitutes a shipment. For low-level waste, therefore, a shipment could have 14 boxes, a TRU waste shipment could involve three containers, and a spent fuel shipment could consist of a single package. For rail shipments, one rail car was equivalent to one 18-wheeler truckload, for now. In other words, one railcar would be one shipment. Mr. Blackwell observed the difficulty in using clear terminology to denote "shipment" versus "trips" or "movements." Mr. Fawcett agreed. He said his group was planning to show the number of movements or trips in the coming two years; the number of shipments (i.e., packages) over the next five years; and, for the ten-year projection, showing the anticipated volume of materials to be shipped.

Mr. Fawcett said DOE would communicate material class in the terms that responders are familiar with, which are the DOT classifications (LSA I, II, and III, e.g.). He said the bulk of the material will move in 2001-2005. A majority of this material would be low-level radioactive waste. Mr. Blackwell asked if DOT's upcoming adoption of the latest IAEA standards regarding Type A and Type B packaging criteria would affect DOE's projections. Mr. Fawcett said he did not think DOE would follow the new standards, largely because most of the material is already packaged.

For each of the major 11 EM sites, DOE looked at incoming and outgoing shipments. For each of the waste streams, the maps show approximate schedules. Mr. Fawcett cautioned that all this information is for the purposes of planning; it is only about 75 percent accurate. Starting in 2000, DOE would show the actual amount of waste that was shipped, not just the projected amount.

Mr. Fawcett asked the committee if having information on the numbers of shipments, volumes, and material types being shipped would help emergency planners to prepare. He said DOE has been criticized for doing campaign-specific planning, but the department would continue to do so over the near term. He suggested it might be better for both emergency planners and for DOE to know about all the materials that will come through during a given period of time.

Displaying a regional map, Mr. Fawcett noted that the most direct way to take shipments across the country is through the Midwest on I-70 or I-80. He added that ordinances prohibit hazardous materials shipments through the Eisenhower Tunnel and over Loveland Pass in Colorado. By excluding all hazardous materials shipments rather than just radioactive materials shipments, these ordinances have been able to stand.

Mr. Fawcett showed an example of the type of map the states can receive, displaying waste shipment estimates along possible routes. He said the states should contact Ms. Noelle Kostecki (DOE-Chicago) if they would like this information. Ms. Sattler noted that the routes depicted are not necessarily realistic ones. Mr. Fawcett said DOE could provide data maps showing the routes DOE plans to use. Ms. Sattler said she would send Ms. Kostecki a request for maps for all the Midwestern states.

Mr. Fawcett addressed the 1999 Transportation Barriers Report. Different teams looked at the various barriers and identified possible solutions. DOE was currently working to resolve some of these barriers. The packaging strategy team would meet in Chicago in November to talk about several issues, including packaging certification. For example, a great deal of material could be moved in an existing package with minor modifications to the certificates of compliance. In some cases, DOE might need to develop a new package. This process could take 7-10 years to go from identification of need to putting the package on the road. Hydrogen gas generation was another key barrier. DOE was looking at ways either to absorb it or keep it from being generated in the first place.

In summary, Mr. Fawcett said NTP was developing a corporate strategy to improve the department's transportation capabilities. He said this was the first time DOE had been able to provide the "big picture" of what is moving, how, what impact will it have on the jurisdictions, and how can they prepare. This initiative would integrate operations, institutional activities, and the TEPP program. Mr. Fawcett said the integration documents would all be available on the

NTP website (www.ntp.doe.gov). Interested parties could also address requests for hardcopies to Mr. Fawcett at fct@inel.gov.

NTP Program Update, Part II: Institutional Activities

Ms. Holm began her update with a review of the consolidated grant project. The purpose was to direct more funding to the states and tribes that are affected by shipments to help fund planning and preparedness activities. In addition, the consolidated grant approach would tie funding levels to actual impact. The Secretary of Energy approved a decision memorandum directing the development of an implementation plan laying out the process for DOE to develop the grant concept further. The draft implementation plan had undergone internal review. After the DOE Senior Executive Transportation Forum reviewed the draft, the states and tribes would have a chance to provide input. After the secretary approves DOE's approach for working with the states and tribes, developing the grants could take up to 18 months.

Ms. Holm said some of the issues surrounding the grant include allowable activities, eligibility, the allocation formula, criteria for evaluating grant applications, and the consideration of tribal needs. She noted that allowable activities seemed to be one of the less contentious matters, with most parties agreeing to a set of possible activities.

The overall goal for the consolidated grant was to enhance public safety relative to DOE radioactive materials shipments. For DOE, the grants would result in streamlined administration and consistent program approaches to assisting the affected states and tribes. Recipients would benefit from greater flexibility, more consistent and systematic assistance, and more control over planning at the state or tribal level. To date, concerns have included the seemingly accelerated process for implementing the grant, making sure all issues are captured and answered in a systematic way, making sure all programs are on board, and the need for adequate funding for the grants.

Current activities included a briefing for the Senior Executive Transportation Forum on October 26. DOE was revising the implementation plan, and would have a 30-day review period for external groups. The consolidated grant topic group would have a conference call in November or December, followed by a meeting at the February TEC/WG meeting.

On the subject of protocols, DOE was completing the internal review of the introduction and glossary. This section would go out to the protocols topic group in mid-November. The entire protocols package would be presented to the Senior Forum. The DOE Protocols Steering Group recommended including the protocols as a manual in the revision of the DOE transportation orders.

The next TEC/WG meeting would be February 6-7 in Portland. The meeting would focus on the topic groups. DOE was planning to have a plenary session on TRANSCOM 2000. Program updates would be handled through poster sessions, as at the July 2000 meeting. NTP was working with DOE's Office of Contract Reform and Privatization on a study of low-level radioactive waste (LLW) transportation and how to improve the processes within the department related to LLW. Ms. Holm anticipated that the findings of the study would point to the need for a centralized procurement strategy. DOE was also looking at the potential for capital improvements at sites — such as intermodal capabilities (except in Nevada).

Ms. Holm added that DOE would hold a packaging workshop in Santa Fe on November 6-7. The workshop was open to anyone who wanted to participate. NTP was also revising its approach to conducting local government activities related to transportation. Formerly, NTP sponsored regional workshops twice a year, during which local government officials could hear updates on shipping activities and emergency preparedness resources. Usually, these meetings were tied to specific shipping campaigns. DOE was interested in identifying new and better approaches to reaching out to local and elected officials, ideally tying this outreach to existing organizations. Ms. Holm said she would have a strategy meeting in a few weeks to discuss new approaches, and she said a representative of the Midwestern region would be welcome to attend.

The Prospective Shipments Module (PSM) is being updated and disseminated on a regular basis. The information that feeds into the PSM is getting more precise. Ms. Holm said there is a need to coordinate with Mr. Fawcett's group to make sure the PSM projections and those in the integration documents are consistent. Ms. Holm said the PSM is not available on the Internet, but is being e-mailed to the regional groups. Mr. Wells asked about the DOE point of contact for the university shipments of spent fuel. Ms. Holm said Mr. Bill Van Dyke, listed in the PSM, is the program lead for the DOE Nuclear Energy Program. Idaho holds the carrier contract for the university shipments.

DOE TEPP Region 5 Update

Ms. Kostecki said DOE Region 5 held its first TEPP workshop in August at Argonne. Six of the 10 states in Region 5 attended. The participants decided to have a yearly TEPP workshop, although the date and location had not yet been identified. The August workshop consisted of shipment overviews from various programs, plus presentations on the Illinois Department of Nuclear Safety, Exercise POPEYE, and DOE's Radiological Assistance Program. The remainder of the workshop was split between public information officer training and a MERRTT train-the-trainer session.

Ms. Kostecki polled the Midwestern states to identify some of their needs. She suggested that the states should consider conducting a needs assessment, with a model one being available on the TEPP website. She said she had recently worked with Mr. Jon Schwarz (Nebraska) to develop a plan of action for the State of Nebraska. Mr. Crose said he was considering the ORISE public information officer training for local responders in Indiana. Mr. Flater said Iowa would not be able to keep all the volunteer fire departments trained. Instead, the state was working with regionalized hazardous materials teams. Ms. Sattler asked if Iowa had done any training along the north-south corridor in the state. Mr. Flater said some training was being conducted.

Ms. Sattler asked for clarification on the TEPP program. She asked specifically if training was available to states along corridors that were not currently being used for shipments. She asked what DOE's response would be to a request from the State of Minnesota, for instance, for training in connection with shipments of spent fuel from Prairie Island to the Private Fuel Storage facility. Ms. McNeil said TEPP materials and information would be available, but not training. The reason was that each DOE region had a limited budget to spend on TEPP activities. Ms. Sattler asked if training would be available to a state such as Minnesota if the other states — those that had ongoing shipments — were not interested in TEPP training in a given fiscal year. Ms. McNeil and Ms. Holm said that DOE would make such decisions on a

case-by-case basis. Mr. Fawcett noted that DOE-Idaho had helped the state of Montana to develop a radiation program, even though the state does not see any DOE shipments. He emphasized, though, that the state had done most of the work on its own — DOE mainly provided information.

Mr. Smith cautioned that there was potential liability associated with training if it did not meet the exact purpose identified for the program. He cited an example of WIPP training being provided in connection with an activity that did not fall under the purview of WIPP. He suggested that it might be more acceptable for non-corridor states to send their trainers to WIPP to take the train-the-trainer course, rather than asking the WIPP trainers to come out to the states to do the training.

Resuming the informal state-by-state needs reporting, Mr. Owen said the Ohio Emergency Management Agency does the training for radiological response, and have factored in the TEPP training. Ms. Carol O'Claire (Ohio) said Mr. Tom Breckenridge and one other person had attended the STEP train-the-trainer course. Mr. Breckenridge was now hoping to incorporate the WIPP training into the Ohio EMA curriculum. Ms. Sattler said she had spoken with Mr. Breckenridge about conducting a WIPPTREX exercise, possibly in conjunction with the State of Kentucky. Ms. O'Claire said Ohio EMA would need both funding and approval from the executive director before moving forward. Mr. Ron Edmond (Oak Ridge Associated Universities) said he was aware that the State of Kentucky is interested in doing a joint exercise with the State of Ohio. The Kentucky point of contact is Mr. Homer Druin.

Mr. Runyon said once the WIPP routes are settled, his agency would likely provide information to local responders. He said he would be happy to work with the TEPP program, but in general did not favor the approach of providing training to fire departments.

Mr. Strong said Ms. Kostecki and Ms. Chris Van Horn had gone to a statewide hazardous materials conference in Michigan in September. The conference was sponsored by the Emergency Management Division of the Michigan State Police. Mr. Strong said some good feedback had been generated from the meeting. He planned to meet in a few weeks with representatives of various divisions to discuss how to make use of the resources available through TEPP. Mr. Strong said he was also interested in sending Michigan state trainers to WIPP for the train-the-trainer course.

Mr. Kerr said he had not yet seen the TEPP CD-ROM. He said Minnesota was in the same situation as Michigan: interested in what was available, but not on a corridor for ongoing shipments.

Ms. Bacon said Wisconsin has eight regional hazmat teams, which were trained to the technician level (at a minimum). The Health Department has also done some radiological emergency training. She noted that the hazmat teams lacked equipment. Ms. Sattler asked Ms. Kostecki and Ms. Bacon about a statement in the TEPP Workshop summary regarding Wisconsin seeking assistance from DOE. Ms. Bacon said the radiological protection program had done a self-assessment with regard to emergency response to power plant accidents. This program would do some training beyond the scope of nuclear power plant accident response.

Federal Railroad Administration Update

Mr. Blackwell explained that the Safety Compliance Oversight Plan describes what the FRA will do with rail shipments to raise the confidence level and safety of shipments. The FRA's original one-page policy had come out of the Three Mile Island shipments of the 1980s. The SCOP, which expands upon the one-page policy, came about as a result of the foreign research reactor spent fuel shipment by rail from Concord, California, to INEEL. Some items in the SCOP are not regulatory based. State participation is included in the SCOP. Mr. Blackwell said he planned to release a revised SCOP for comment in the near future. The document would be distributed to the regional groups for further dissemination to the states for review and comment.

Mr. Blackwell said, with the increasing frequency of shipments, the FRA would not be able to do for every shipment exactly what the SCOP lays out. He was drafting an implementation plan for how the FRA would implement the SCOP under a regime in which shipments increase significantly in frequency. This activity tied in with a "flagship" initiative involving radioactive materials transportation at DOT, which meant that the matter would be addressed at the secretarial level. The SCOP and other information is available on the FRA website. Mr. Blackwell said the August 30 *Federal Register* had included a notice on the new FRA bridge inspection policy.

Mr. Tom Lange (Missouri) asked Mr. Blackwell about the extra-regulatory items in the SCOP. Mr. Blackwell emphasized that the SCOP itself is a policy, not a regulation or requirement. He said the security section and grade-crossing safety are examples of extra-regulatory items. Many of the items are regulatory based. Running a track-geometry vehicle over the track, for example, would verify that the track is up to the designated class. To answer Ms. Sattler's question, Mr. Blackwell said track class is directly tied to the train speed, not necessarily to the amount of tonnage that operates over the track. The latter affects the required inspections if certain tonnages are exceeded.

Mr. Lange asked about the SCOP calling for shippers to consider track class when identifying routes. Mr. Blackwell explained that the SCOP asks shippers and carriers, during the planning process, to consider using the highest track class possible, taking into account other factors. In answer to a question, Mr. Blackwell said there is no requirement for shippers to comply with the SCOP. Rather, if the shipper does not comply with a regulatory requirement that the FRA will be checking *because of* the SCOP, then the shipper will not be in compliance with regulations. Mr. Blackwell said one goal was to make sure hazardous materials and motive power and equipment inspectors were at the point of origin to conduct inspections. Again, though, he cautioned that, as the frequency of shipments increases, meeting this goal might not be possible. Mr. Blackwell said the FRA had requested sufficient budget to hire additional inspectors — one in each discipline in each of the FRA regions. He suggested that increasing participation in the State Safety Participation Program would be a better option for ensuring an adequate number of inspectors.

Mr. Lange asked again about the track geometry vehicle. Mr. Blackwell said the FRA was running the track geometry over the tracks for the foreign research reactor spent fuel shipments and for the Carolina Power and Light shipments. He said the vehicle would run along the entire West Valley route in April, or as close to the actual shipment as possible. Ms. Sattler asked if the state inspectors would be involved with the track inspection. Mr. Blackwell said certified

track inspectors might be involved if they were interested. In response to a question from Ms. Sattler, Mr. Blackwell said the FRA does not inspect the track for the Naval Nuclear Propulsion Program shipments because the program does not provide adequate prenotification. Instead, the FRA knows the routes that the program traditionally uses, and keeps an eye on those routes as much as possible.

Mr. Blackwell said his office had not received any formal feedback on the FRA's memorandum regarding the right of states and tribes to stop and inspect shipments. He had heard some negative feedback from participants at the July TEC/WG meeting. Mr. Runyon said the IDNS legal department was looking at the memo and would likely be in contact with the FRA.

Mr. Blackwell said the FRA's regulations do not address rail routing guidelines. He said, however, that he anticipated being asked to develop such guidelines eventually — perhaps in connection with amendments to the Nuclear Waste Policy Act. He was considering putting together a scoping group to get a head start on developing rudimentary routing guidelines. He had been in touch with the Association of American Railroads (AAR) on the subject. He emphasized that this idea was still very tentative, and he had no plans for the first meeting of such a group. Ms. Sattler suggested piggybacking a meeting onto a TEC/WG meeting. Mr. Blackwell worried that doing so might confuse people and make the scoping activity seem more formal than it is.

On the subject of the State Safety Participation Program, Mr. Blackwell said Mr. Mike Calhoun (FRA), who worked out of California, was the program manager for the program. The FRA would cover the training and travel costs associated with training. Mr. Blackwell provided Ms. Sattler with information on the program and on current inspectors, for posting on the CSG website. Eighteen states do not participate at all in the program, including several in the Midwest. Ms. Sattler asked if funding an inspector's salary would be an allowable expense under the consolidated grant program, and Ms. Holm said it would.

Mr. Blackwell asked about one of the Midwestern region's comments on the West Valley planning documents, specifically the comment that the FRA should act more as a regulator and less as a member of the project team. Mr. Runyon clarified that the SCOP made up a good portion of the West Valley transportation plan, which the states found unacceptable. If a DOE truck transportation plan had incorporated highway regulations instead of simply citing them, the states would have had the same objection. Mr. Runyon also observed that the FRA was working very closely and cooperatively with DOE on the West Valley shipment, and he contrasted this activity with the FRA "kicking the states in the teeth" in its legal opinion on state inspections.

Ms. Sattler asked if Mr. Blackwell had heard anything about future shipments from Three Mile Island. Mr. Blackwell said he had not.

Federal Motor Carrier Safety Administration Update

Mr. Rich Swedberg said the president had signed the DOT budget bill, which awarded FMCSA \$269 million for FY01. This funding included a large boost for the Federal Motor Carrier Safety Assistance Program, which funds the states. He noted that the big push within the FMCSA is "Fifty by 2010" — a 50-percent reduction in fatal commercial vehicle accidents by the year 2010.

Mr. Swedberg said FMCSA is the cognizant administration for rulemaking as well as jurisdictional issues pertaining to routing. He said a *Federal Register* notice on highway route-controlled quantity (HRCQ) routing would be coming out shortly. The notice would identify preferred routing for radioactive materials and hazardous, non-radioactive materials shipments, including state-designated routes. In addition, the FMCSA has a national highway routing registry available on-line. The registry does not plot HRCQ routes, but it does identify preferred and designated routes in each of the states, as well as state points of contact. The *Guidelines* documents for designating alternative routes for radioactive materials and for non-radioactive hazardous materials are also available. The address for the routing registry is <http://hazmat.fmcsa.dot.gov>.

Mr. Swedberg also provided an update on CVSA training, filling in for Mr. Jim Daust. CVSA just finished a great class in Bloomington, Illinois, the first week of October. A total of 45 people attended, which was the largest class ever. The class included 31 Illinois State Police officers, a representative of the Indiana State Patrol, and 10 drivers from Tri-State. Sgt. David Beasley from Illinois set up the class. Sgt. Beasley is now the chair of the CVSA Hazardous Materials Committee. The next class is scheduled for the week of January 8 in Albuquerque.

DOT had pulled back from implementing its proposed hour-of-service change until after October 1, 2001. In addition, the Research and Special Programs Administration is moving slowly on the incorporation of the IAEA requirements. The sticking point for the U.S. was whether to give up the 70 Bq/g lower limit of regulation in favor of the IAEA-recommended per-nuclide and per-conveyance limits. He noted that the last update took eight years to incorporate.

Lastly, Mr. Swedberg notified the states that the DOT Inspector General's office was conducting an audit of the radioactive materials transportation activities within the department. He said the audit began as an information gathering process, but then grew into a full-fledged audit. On the positive side, the audit would bring information to the attention of upper DOT management. One possible down side would be wrong, incomplete, or incorrectly gathered information leading to questionable recommendations. Mr. Swedberg said the DOT IG might contact committee members, or possibly other people in the states that have never really worked with DOT on radioactive materials transportation. He encouraged the states to tell the inspectors what the DOT staff are doing right and how to improve their activities.

Ms. Holm announced that the annual CRCPD directory will soon be available on-line.

Waste Isolation Pilot Plant Update

Mr. Smith reported that DOE had selected Tri-State to receive the "large carrier" contract. Tri-State will handle two-thirds of the WIPP shipments. The remaining one-third of shipments will be handled by CAST Trucking, the incumbent carrier, which received the "small business set-aside" contract. Both contracts are for five years. For the time being, it appears that Tri-State will ship from Idaho and Rocky Flats. CAST will do the sites that are just starting up shipments.

In addition, two companies hold contracts for manufacturing TRUPACT II containers: EPD in New Mexico and NAC in South Carolina. DOE has already received three new containers from EPD, with the first from NAC scheduled for delivery in December. The RH-72B container and the trailer to transport it should be begin to be delivered in September 2001.

Westinghouse TRU Solutions will be the management and operations contractor for the WIPP site. Mr. Smith explained that the Albuquerque Operations Office is no longer a part of the Office of Environmental Management, but is under the National Nuclear Security Administration. Ms. Holm clarified that Albuquerque still has several EM projects, including the National Transportation Program. The secretary elevated the Carlsbad Area Office to the status of a Field Office. The new acronym is CBFO. The Carlsbad Technical Assistance Contract is still in process.

Mr. Runyon asked about Tri-State's financial situation, noting that the company had been in bankruptcy proceedings just over one year ago. Mr. Smith said the evaluation board looked very closely at the bidders' financial outlook, and was satisfied that the company was in good shape. Ms. Sattler noted that the NRC had prepared an inspection report following the cross-country shipment, and had implied that Tri-State's financial troubles had contributed to the poor quality of the equipment used on the 1999 cross-country shipment of foreign research reactor spent nuclear fuel.

In response to a question from Mr. Swedberg, Mr. Smith said the carrier contracts would cover the costs of purchasing new equipment, such as trailers to transport the TRUPACT II containers. Mr. Smith also mentioned that there were some minor problems with cracks in the TRUPACT II trailers. He said the trailers do not conform to ANSI standard 14.30, since they were designed and procured prior to the establishment of this standard. DOE will procure more trailers that conform to this standard. This process could begin shortly after the start of the new year.

Mr. Smith handed out a schedule showing tentative site audit/certificate dates and the numbers of shipments from the major sites. Mr. Smith expected Savannah River Site (SRS) to begin shipping in the spring of 2001. He explained that DOE had revised the way it classifies the sites. As a result, there are now five large generator sites: Hanford, INEEL, Rocky Flats, Los Alamos, and SRS. In addition, there are just under two dozen small quantity sites. Mr. Smith said there could eventually be as many as 100 small quantity sites. He noted that the West Valley TRU waste is not defense related, therefore could not go to WIPP under the current law.

Mr. Carlisle Smith (Ohio) asked Mr. Smith if the Portsmouth Gaseous Diffusion Plant in Ohio was one of the sites. Mr. Smith said it was not, but the Paducah Gaseous Diffusion Plant in Kentucky was one. Mr. Runyon asked about the proposed route from the Paducah plant, which looked like it would travel north into Illinois before turning south. Mr. Smith said this route was a "placeholder," and that the final route would be negotiated. He added that the shipment from Paducah would fall under requirements for highway-route controlled quantity shipments. Mr. Smith added that the Rock Island site will be put back on the map. Ames was no longer on the list of sites. Ms. Sattler asked Mr. Smith to find out what happened to the Ames waste, and he said he would. He added that the sites control their own waste programs. WIPP does not have any influence over where the sites ship their transuranic waste. Ms. Sattler asked to what extent the National TRU Program was reaching out to the DOE and other sites with TRU waste. Mr. Smith said the program reached out as much as possible. Ms. Sattler noted that the Spent Fuel Program does not control the university shipments, but Mr. Bill Clark at SRS worked closely with the shippers. Mr. Smith agreed, and said CBFO tried to influence what the sites do, but could not dictate anything.

Mr. Flater asked Mr. Smith about the Iowa Munitions Depot. Mr. Smith said the site had not yet contacted DOE regarding the presence of any TRU waste at the facility. He said he would update the information he had on a regular basis, and send any new information to the states through Ms. Sattler.

Mr. Smith then addressed the subject of routing for shipments through the Midwest. He said DOE had consulted with the affected states about using I-80 for the Argonne shipments to WIPP instead of the currently identified route using I-57. A total of 37 shipments would travel on this route, including 15 from Battelle, 19 from Argonne, one from MURR, and possibly two from Rock Island. A few of the Western states had some problems with the use of I-25 south to WIPP. Mr. Runyon asked about the schedule for shipping from Argonne, and Mr. Smith said shipments would start in October 2001, possible as early as the spring of 2001.

Ms. Sattler asked why the States of New Mexico and Colorado were objecting to the use of I-25 for 37 shipments coming from the Midwest when the same corridor would be used for 15-20,000 shipments from Western sites. Mr. Ross said the issue centered on the origin of the waste — namely, “eastern” sites versus western sites. A great deal of low-level waste travels west along the I-80 corridor, which is an issue for the Western governors. The states had agreed to let DOE use the I-25 corridor for WIPP shipments from INEEL, Hanford, and Rocky Flats, but had been told that “eastern waste” would travel along I-20 to US 285. Ms. Sattler said the situation was unacceptable.

Mr. Flater said DOE’s inaction on the routing issue would force the Midwestern states to enact legislation charging a fee on shipments. He noted that a fee would affect all DOE shipments, not just those under the WIPP program. Mr. Crose agreed. He worried that the Western governors were pitting themselves against the other 37 governors in the continental U.S. Mr. Ross said he did not think this issue was insurmountable. He said DOE, the states, and WGA would get together to try to resolve the matter.

Mr. Smith acknowledged the lack of funding for the Midwestern states. Ms. Sattler said the funding is long overdue. She noted that the Western states had benefited from years of both funding and training from DOE, whereas the Midwestern states were being asked to scramble at the last minute to prepare responders with insufficient funding. She added that the Midwestern states had been more than reasonable in working with DOE on the intersite transfers. She expressed the states’ appreciation of Mr. Baillieul working so closely with them on the Battelle shipments. Mr. Flater said, within 60 days, he intended to see legislation introduced in the State of Iowa to charge a fee for shipments, with the purpose of funding state preparedness activities. Ms. Sattler asked if there was anything the Midwestern High-Level Radioactive Waste Committee could do to move this routing issue forward. Mr. Smith said he did not think so.

Ms. Sattler asked if DOE had presented the proposed route change to the Western states as a Midwestern state initiative. Mr. Smith said there had been some confusion in communicating the proposed route change. A presentation had been made to the National Governors’ Association in which it was announced that 1,100 shipments from small quantity sites would use the I-25 corridor. Ms. Sattler asked Mr. Smith if DOE could provide the committed funding to Iowa and Nebraska prior to the routing matter being resolved. She cited the cross-country shipments as setting a precedent: states that were on potential corridors were eligible for funding because DOE

recognized that there would be insufficient time to prepare responders if the states had to wait for a final decision on the route.

Mr. Runyon noted that the Midwestern states had traditionally been very cooperative in working with DOE on shipments of radioactive materials. He said the treatment the states had received did not seem like a fitting reward for good behavior.

Mr. Rick Moore discussed the status of the WIPP transportation plan, which he was developing under contract with DOE. The plan covers truck shipments that are under the direct control of the CBFO, including those going to or from WIPP. A peer review draft of the plan had been distributed to a small number of people for comment. Mr. Flater and Ms. Sattler had provided comments on the peer review draft. In developing the plan, the priority was to meet current laws and regulations first, followed by DOE Orders, then other agreements or commitments. A revised draft was ready for internal DOE review, following which Mr. Moore would seek comments from the states through the regional cooperative-agreement groups. He hoped to get the revised draft out for external comment in January 2001.

Mr. Moore was preparing his response to the comments submitted on the peer review draft. He added that the plan would address contact-handled (CH) shipments only, but would be revised at a future date to cover remote-handled (RH) shipments, as well. Mr. Smith said he did not anticipate many differences in how RH shipments would be handled compared to CH shipments. Mr. Smith noted that CBFO would work closely with both Battelle and Mound to develop the transportation plans for those shipping campaigns.

West Valley Demonstration Project Update

Mr. Ahmad Al-Daouk (DOE) presented information on the upcoming rail shipment of spent fuel from West Valley, New York, to INEEL. The shipment is scheduled to take place between April 1 and October 31, 2001, with weather considerations being the primary factor in setting this timeframe. The shipment will consist of one shipment containing two casks holding 125 spent fuel assemblies. The material will travel by dedicated train, and the entire time in transit is estimated to be four days.

On November 9, DOE would announce the route for the shipment. The NRC had certified both packages for shipping half loads; DOE was now working with the NRC to certify the containers for full loads. Mr. Al-Daouk thanked the states for their input on the draft planning documents. He reviewed DOE's responses to a few of the Midwestern regional comments. DOE would allow the states to view the shipment on TRANSCOM from the point of origin to one hour after leaving the state. In addition, once the route is announced, DOE would work with each state to address emergency preparedness needs.

ALK, the independent contractor that reviewed the Oak Ridge National Laboratory (ORNL) study, identified 16 new segments; the company could not, however, fully evaluate those new segments using its database. DOE had, therefore, asked ORNL to look at the new routes and compare them to the originally proposed routes. The preferred route that resulted from that study was almost identical to the original preferred route, with the exception of the first segment of the route. The new preferred route would go through the reservation of the Seneca nation. Mr. Al-Daouk commented that ALK did not fulfill the terms of its contract. Mr. Al-Daouk explained

that the INTERLINE model considered “hand-offs” and distance, among other factors, in evaluating the possible routes.

DOE was working to incorporate the states’ comments into the revised planning documents. On November 9, DOE would announce the routes to the states. On December 5, DOE would host a planning meeting in Chicago to iron out all remaining issues and concerns. Up to four people from each state would be reimbursed for their travel to the meeting. On January 16-17, DOE would host “corridor briefings” in Chicago. The briefings would be informational meetings for three or four representatives of each of the corridor states. Internal meetings following these sessions would put the finishing touches on the planning documents.

On the subject of assistance to the states for training, Mr. Al-Daouk said DOE would put staff on the train that are knowledgeable in emergency response. He also said the carrier would initiate the emergency response by calling local authorities. In addition, the shipment will be tracked by TRANSCOM. Mr. Al-Daouk said DOE would abide by the incident command system. The participants engaged in a lengthy discussion of the need for and propriety of DOE providing financial assistance to the corridor states to prepare for shipments of radioactive materials. The burden of preparing for these shipments goes beyond the states’ responsibility to prepare for emergencies involving hazardous materials. In many jurisdictions, first responders are volunteers. Furthermore, courses on response to emergencies involving radioactive materials are often not well received, given the common perception of radioactivity by the general public.

Mr. Lange asked Mr. Blackwell if the FRA’s track geometry vehicle would travel along the entire route shortly before the shipment. Mr. Blackwell said the schedule would be developed to ensure that the inspection took place as close to the shipment as possible. Mr. Lange also asked if DOE would be able to narrow the shipment timeframe at the January meetings. Mr. Al-Daouk said, as the schedule is refined, the points of contact that DOE has been working with would receive information narrowing the shipment window. In addition, the states will receive the seven-day notification, as required by DOE orders. Ms. Sattler noted that, for the cross-country shipments of foreign research reactor spent fuel, SRS had informed the states of the month during which the shipment would likely take place. Mr. Lange requested a copy of the correspondence with ALK as well as a copy of the recently revised ORNL study. Ms. Sattler asked Ms. Keister to send her this information, and she would distribute it to the Midwestern corridor states.

Private Fuel Storage (PFS) Update

Mr. John Parkyn (PFS) presented an update on the Private Fuel Storage project. The purpose of the project is to build a 100-acre temporary storage facility for up to 40,000 MTU of commercial spent nuclear fuel. There are two parts to the federal license to operate the facility. First, the draft environmental impact statement was issued in June, and the public comment period ended September 21. The final environmental impact statement should be issued in February 2001. Second, the first part of the Safety Evaluation Report was issued December 15, 1999, with public hearings in June 2000. The final Safety Evaluation Report was issued in mid-October 2000. The Atomic Safety Licensing Board has set issuance of the license for November 30, 2001.

PFS will accept only rail shipments. The multi-purpose canisters were certified in the last six months and have a capacity of 68 BWR/24 PWR assemblies. The NRC is looking at burnup credit, which would change the PWR capacity to 32 assemblies. Typically, each cask will hold

10-11 MTU of spent nuclear fuel. All the equipment will be owned by PFS. Eight utilities are partners in the consortium. Illinois Power Company sold the Clinton Nuclear Power Station to Florida Power and Light. The four reactors owned by FP&L will send their spent fuel to PFS. Mr. Parkyn reminded the committee that all utilities will have access to PFS, but the eight utility owners will have first priority. In response to a question, Mr. Parkyn said the containers were multi-purpose, therefore they could be used for transportation and storage. DOE would have to determine whether the containers would be suitable for disposal in the repository.

Spent fuel will not be handled in any way in Utah. There will be 4,000 storage casks on the site, but the shipping cask fleet will consist of roughly 50 casks. The site is not currently accessible by rail. Part of the project is the construction of a 32-mile long rail line. PFS has filed an application with the Surface Transportation Board to receive the appropriate permits to do so. The first railroad car will be tested to meet a new standard for shipping spent fuel, originally proposed by the Union Pacific Railway and endorsed by the American Association of Railroads. PFS will provide the locomotive, buffer cars, security car, and the cask cars. Manufacture of the first cask car started last week at Trinity Industries in Texas. The car will be shipped to Pueblo in February for testing. All the cars will have shelf couplers and electropneumatic braking (which will reduce stopping distances by at least 10 percent). Mr. Blackwell asked if multiple shops at Trinity Industries were preparing the cars, or just one. Mr. Parkyn said he thought just one shop. PFS will own the transportation casks, transfer casks, and storage casks. The utilities will pay for shipping. PFS is responsible for the decommissioning costs, with the site returned to "greenfield," including the removal of the rail line.

How long the material is stored will depend on the utility's on-site storage situation, where it stands in the DOE queue, when DOE begins to operate the repository, and the rate of acceptance at the repository. Each utility will have the right to leave the spent fuel at PFS as long as necessary. Mr. Parkyn is anticipating legal challenges to an affirmative licensing decision in 2001. The first shipments will likely begin in December 2003. The eight utility partners have first priority in every year.

Mr. Parkyn said the coalition had worked quite well. He said PFS was in no way a competitor of the Department of Energy. In response to a question from Mr. Schwarz, Mr. Parkyn said PFS had always assumed that any potential host state would oppose the project. The State of Utah has been a major intervener every step of the way. Mr. Parkyn commented that the NRC's process permits interveners to affect the outcome of the proposal without necessarily stopping it.

Mr. Strong asked about the availability of funding for emergency preparedness, akin to what DOE would provide under Section 180(c) of the Nuclear Waste Policy Act. He asked, given the great deal of money involved in this project, how might PFS address state and local preparations for shipments. He also noted that DOE was looking into the possibility of paying for spent fuel storage at PFS as part of its obligation under the NWPA. He wondered if PFS would remind DOE of the department's responsibility to fund the states to assist in preparing for shipments. Mr. Parkyn said PFS would be talking to DOE regarding its obligation to fund training along the routes. He said the utilities had made payments into the Nuclear Waste Fund specifically to cover the costs of the Civilian Radioactive Waste Management System, part of which was the transportation program. He said any supplemental funding would have to be discussed after PFS was closer to a licensing decision.

Mr. Strong noted that the Midwestern committee and its counterparts had all agreed that adequate lead time is critical to ensuring adequate preparation. The draft DOE policy on Section 180(c) would provide funding three years prior to the start of shipments, which the states regarded as a minimum. In other words, he said, PFS should begin working closely with the states sooner rather than later, given the December 2003 target date for shipping. Mr. Parkyn acknowledged Mr. Strong's comments, and said he used to do emergency planning at the LaCrosse nuclear power plant and understood this was not something that could be done at the last minute.

Mr. Owen commented that the states would like to be involved in the selection of the shipping routes. Mr. Parkyn explained that the representative route in the draft environmental impact statement was from Maine Yankee, which was not even a PFS partner. He said the NRC had selected that route so that its estimate of the transportation risk would be very conservative. Mr. Parkyn said PFS would involve the states in routing decisions.

Mr. Kerr asked to what extent the target date of December 2003 took into consideration potential roadblocks. Mr. Parkyn said the schedule does have some allowance for potential legal challenges. Ms. Bacon asked if PFS has prepared a schedule of shipments yet. Mr. Parkyn said the utilities would first have to complete their service agreements to identify how much spent fuel they hoped to ship in each year. The utilities would have to designate roughly 18 months to two years ahead of time which spent fuel they will ship, in what year, and when during the year. In response to a question, Mr. Parkyn said the Nuclear Management Company in the Midwest is not a party to PFS, but that Northern States Power is.

Ohio Transuranic Waste Shipments

Battelle RH Shipments: Mr. Baillieul presented an update on the RH-TRU waste shipments from Battelle in Columbus. Battelle had packaged 19 drums of RH-TRU, with 13 more in the process. Although Battelle has not been certified to package material for disposal at WIPP, Mr. Baillieul said the packaged drums meet all the expected requirements for disposal at WIPP. Battelle leased a CNS 10-160B Type B shipping cask to use in transporting the material. Originally, WIPP had indicated that it would only accept RH waste in the RH-72B container, however WIPP has now agreed to develop a process for receiving RH waste in drums inside a 10-160B container.

In September, Battelle completed cask loading and unloading demonstrations both in Columbus and at WIPP. Mr. Baillieul commented that WIPP cannot commit to receiving RH-TRU prior to January 2002. To meet Battelle's schedule for site closure, DOE would have to ship its RH-TRU to an interim site for temporary storage. Hanford was still the preferred site, although it was also possible that the WIPP site would be able to take the material for temporary storage (pending an amendment to the RCRA permit issued by the State of New Mexico). Mr. Baillieul showed a video of the CNS 10-160B demonstration.

Mr. Owen asked if the CNS 10-160B container would replace the RH-72B cask developed by the WIPP program. Mr. Baillieul said it would not. The 10-160B container could only be used to transport a limited number of curies of plutonium, therefore it could not accommodate much of the RH waste at other sites. Mr. Baillieul said Battelle expects to make 10-12 shipments in the 10-160B, whereas using the 72B cask would require around 36 shipments.

In response to a question from Mr. Runyon, Mr. Baillieul said (assuming Hanford as the receiver site) he anticipated a three-week turnaround time for each shipment, which would result in a nine-month shipping campaign. Mr. Owen and Ms. O'Claire asked about the possibility of a CH shipment. Mr. Baillieul said Battelle had a small amount of CH waste on-site. The preference would be to ship all the TRU waste together to an interim facility. WIPP, however, was trying to demonstrate its ability to use mobile vendors to characterize waste at the WIPP site. In that case, Battelle would contribute its CH material to aid in the WIPP demonstration. At the current time, though, WIPP does not have a permit to do the characterization on site.

Mound CH Shipments: Mr. Vincent from the Miamisburg Environmental Management Project (MEMP) presented information on the planned rail shipment of CH TRU waste from the Mound facility in Ohio using the OHOX railcar. DOE intends to close the Mound facility and turn the site over to the city of Miamisburg for industrial use. Mr. Vincent explained that the waste at Mound is contained in drums and boxes that do not meet the TRUPACT II requirements or simply do not fit. To avoid the added expense of constructing a repackaging facility — and to meet the closure schedule for the site — MEMP preferred to ship the material to another facility for repackaging. Mr. Vincent explained that the Mound waste contained 908 curies of plutonium-238 and only eight curies of plutonium-239. The waste is contained in 150 drums and 33 boxes. A small amount of additional waste will be generated during the decommissioning of the site.

The waste is currently stored in the “T” building, which is one of the buildings that will be transferred to the city. To clean the building, DOE needs to remove the waste boxes. Mr. Vincent mentioned that Mound manufactures radioisotope thermoelectric generators (RTGs) for deep space probes such as Cassini. The RTGs are nuclear battery packs that generate heat, and contain typically 182,000-546,000 curies of plutonium-238. NASA and the U.S. military use the RTGs assembled at Mound.

Mr. Vincent said the waste would likely go to DOE's Savannah River Site, where it would sit until SRS begins to repackage its own boxed waste. That process would likely not begin for another 15-20 years. DOE was negotiating an agreement with the state of South Carolina. For every incoming cubic meter of waste from Mound, twice that amount would have to leave the state. Mr. Vincent suggested this agreement would accelerate the shipping schedule from SRS. SRS would have to ship out before Mound could ship in. The OHOX railcar exemption expires in May 2002.

Mr. Vincent estimated six railcar loads for existing waste, plus another two for future waste. The DOT exemption allows for 10 railcar loads to be shipped from Mound only. DOE has refurbished two railcars. Three to six shipments would take place in the near term, followed by one or two shipments in the future. DOE used the railcars to make 1,118 shipments of TRU waste between 1960 and 1987.

The projected route was to take Norfolk Southern out of Ohio into Kentucky, Tennessee, and Georgia. Near Atlanta, the load would switch to CSX and continue to South Carolina. DOE had not yet put together the transportation plan, and Mr. Vincent was hoping to get input on the process. Once the agreement with South Carolina is negotiated, DOE could begin working on the transportation plan. One of the current planning assumptions is that the FRA would inspect each railcar prior to each shipment. TRANSCOM would be used to track the shipments.

Emergency response would be coordinated between MEMP and SRS. Mr. Vincent noted that the train would always be within four hour of a DOE RAP team. State will receive notification of each shipment. Lastly, the approach was to move the material through commerce, not by dedicated train.

For future activities, Mr. Vincent said DOE would develop a communication plan, work with the states to plan the shipment, and complete all NEPA documentation (e.g., a supplemental environmental impact statement). The first shipment was projected to take place during the summer of 2001. In conclusion, Mr. Vincent said DOE was committed to working with the states, regulators, and other stakeholders “to develop a level of confidence that these shipments will be conducted in a safe and compliant manner.” Public safety is DOE’s number one concern.

Mr. Carlisle Smith noted that Ohio has FRA-certified state inspectors in the hazardous materials and motive power and equipment disciplines. He wondered if the FRA would conduct the point-of-origin inspections, or if the state would be asked to do so. Mr. Blackwell said this was a matter to be worked out.

Roundtable of State and Regional Activities

Illinois: Mr. Runyon reported that the state revised its fee legislation, adding a surcharge for shipments that traveled on routes exceeding 250 miles in the state. The surcharge is \$25 per mile. For the 2000 cross-country shipment, the total fee amounted to around \$6,000. There was some question as to whether the surcharge applied solely to truck shipments or to rail shipments, as well.¹

Nebraska: Mr. Schwarz said DOE would conduct TEPP training in connection with the WIPP and West Valley shipping campaign. Training was likely to begin in mid-January. Mr. Schwarz mentioned that the governor’s office had been contacted by a professor in New Mexico regarding the state’s concerns about radioactive materials transportation. Mr. Schwarz had provided the response to the inquiry.

Indiana: Mr. Crose said the state is now charging a fee for radioactive materials shipments. The State Emergency Management Agency completed its radioactive materials transportation plan, which is out for review. Ms. Sattler asked Mr. Crose to send her a copy of the plan.

Iowa: Mr. Flater distributed some correspondence pertaining to a meeting Mr. Flater and other state agency staff had with Ms. Lisa Gue of Public Citizen’s Critical Mass Project. Ms. Gue had met with Mr. Flater and others in connection with Public Citizen’s “Radioactive Roads and Rails” campaign, which took place during the summer of 2000. Ms. Gue’s letter sought Governor Vilsack’s support for full-scale physical testing of the transportation casks DOE would use for shipments to Yucca Mountain. She also solicited the governor’s perspective on the need for timely transport mode and route designations.

Ohio: Mr. Owen said the High-Level Waste Task Force was assisting the PUCO in establishing acceptable routes in Ohio. The Ohio State University (OSU) was well into its study to identify and evaluate the relative risks of different routes in the state. Three agencies review all the technical documents with which the Task Force works.

¹ Editor’s note: The surcharge applies only to truck shipments.

Mr. Owen said Ohio would need funding to complete training. The Ohio Emergency Management Agency handles emergency response training, while the Department of Public Health is responsible for hospital training. Mr. Owen said he was working with DOE to provide hospital training to facilities along the corridors for TRU waste shipments. Ms. O'Claire commented that the Ohio agencies had been counting on receiving \$125,000 in assistance from DOE, but so far only \$25,000 had been provided. She added that the RMIC laboratory had been certified, so the state could calibrate instruments for other states.

Mr. Carlisle Smith said he was scheduling a CVSA Level VI inspection course in Ohio or elsewhere in the Midwest for the year 2001. He said at least 12-15 people would need to participate, and so far only five had signed up from Ohio. The University of Michigan had completed four shipments from the research reactor. The PUCO conducted its inspections with the Michigan State Police at the point of origin.

Mr. Smith also reported on the controversy regarding the Ohio Turnpike Commission's position that radioactive materials shipments should not travel on the turnpike. The PUCO had submitted a letter to the U.S. Department of Transportation asking for DOT's opinion. DOT replied that the Ohio Turnpike is part of the interstate system, therefore it is considered a preferred route for radioactive materials shipments. Mr. Smith had forwarded the letter to the Turnpike Commission, but had not yet received a response. Mr. Smith commented that the OSU study was funded by the fee the state charges shippers of hazardous materials. The fee system was established by the Alliance for Uniform HazMat Transportation Procedures. Mr. Smith offered to provide other states with information on the uniform program.

Missouri: Mr. Lange began by correcting what he considered a misunderstanding regarding Missouri's reaction to the selection of the "blue route" for the foreign research reactor spent nuclear fuel shipments. Mr. Lange said the state's objection to the use of I-70 was not political, but rather stemmed from the exceedingly poor condition of I-70. He noted that I-70 was probably one of the earliest segments of the interstate system, and was in desperate need of repair. The increase in speed limit to 70 miles per hour had only increased the number of accidents on the highway.

Mr. Lange did not have any information on spent fuel shipments from MURR. He mentioned that the NRC had cited the reactor operator with two violations, although no fines had been levied.

Minnesota: Mr. Kerr said Mr. Parkyn had covered much of what was going on in Minnesota relative to spent fuel storage and transportation. He said draft legislation had been introduced to correct the major deficiencies in Minnesota's fee legislation. Governor Ventura did not let the legislation move forward, however. Mr. Kerr said the state and local governments were lacking in training, equipment, and a means of calibrating equipment.

Wisconsin: Ms. Bacon said the State of Wisconsin was very interested in the PFS project. Like Minnesota, Wisconsin did not have many instruments and was in need of training for first responders. She said Illinois calibrates the instruments for the state.

Wisconsin is in the process of becoming an agreement state. Ms. Bacon said she hopes the state's program will be active in two-three years. The state has legislation on the books allowing for a fee for hazardous materials transportation. The intention had been to use the fees to fund

regional hazardous materials teams. The fee had been determined to be unconstitutional, therefore the legislature stepped in to fund the program using the state's general fund. Mr. Smith volunteered to provide Ms. Bacon with information on the uniform fee program as a possible option for Wisconsin. Ms. Sattler asked Ms. Bacon for a map of the Wisconsin hazardous materials teams.

There was no further business. Mr. Runyon adjourned the meeting at 6:30 p.m.