DOE National Transportation Stakeholders Forum (NTSF)
May 26, 2010
Meeting Summary Notes

Opening Remarks - Steve O'Connor, DOE Office of Packaging and Transportation

Steve O'Connor, DOE/EM Office of Packaging and Transportation welcomed the group to this first National Transportation Stakeholders Forum (NTSF) and thanked the planning committee and the dedication of the Midwest Council of State Government for hosting the meeting. The NTSF will focus on transportation across the DOE complex. Mr. O'Connor announced that the meeting would be recorded and questions for the panel could either be written down and passed to the session moderator or asked via the central microphone. Planners for the meeting have worked to ensure a more engaging panel format and to minimize the use of formal presentations. Mr. O'Connor expressed his pleasure at the number of attendees and the mix of technical expertise represented by the attendees.

The meeting was held in the Westin Inn, Chicago, Illinois and centered on the theme of *Transportation at a Crossroads* which implies we are at a decision point to either continue as in the past or to adjust our direction. Mr. O'Connor referenced the former Transportation External Coordination/Working Group (TEC/WG) which had been moving more into Yucca Mountain Planning and away from other DOE transportation activities. The NTSF Forum is intended to bring the focus back to transportation issues for all DOE fuels and radioactive waste. The NTSF will gather feedback and share information to further develop partnerships and advance relationships with stakeholders. Mr. O'Connor stressed that DOE was interested in hearing how they can be of service and how stakeholders can assist in the development of DOE's transportation programs.

The planning committee designed the format for this meeting to include a moderator for each panel and an opportunity for each panel member to talk briefly about their topics leaving time for questions after each panel member had presented. The format will help to keep PowerPoint slides at a minimum. Topics needing follow-up will be captured and considered for ad hoc committees. The agenda and topics for this first meeting are directed at stimulating conversation.

Opening Plenary: Transportation Across the DOE Complex

This panel consisted of DOE leadership from each of the Program Secretarial Offices addressing the status of transportation activities within their programs and the impact of the American Recovery and Reinvestment Act (ARRA) funding.

Moderator Ken Niles, Oregon Department of Energy, opened the session and re-emphasized the format was to encourage open questions and interaction. Ken noted the panelists were all involved in active DOE shipping campaigns and would go through their presentations leaving time for discussions at the end of the session. Mr. Niles then introduced the panel members.

Frank Marcinowski, DOE-EM Deputy Assistant Secretary for Technical and Regulatory Support *(slides were used).*
Mr. Marcinowski noted that he was pleased at the attendance of so many who are recognizing that transportation is an important part of every operation. DOE maintains that safety in conducting the

shipments is a priority. DOE's Office Environmental Management makes thousands of shipments annually and has demonstrated a very successful transportation program. Shipments have increased as a result of ARRA funding, but the number of incidents has not increased. In FY2010 shipments are expected to double due to ARRA funds as DOE works to reduce their footprint. Transportation impacts the largest number of people among EM operations. Mr. Marcinowski thanked the group for their activities which help DOE's transportation programs continue their safety record. Additional points made by Mr. Marcinowski are listed below:

- High risk waste (tank waste) takes up a significant amount of the budget. EM is now trying to get that waste in a package that optimizes disposal.
- DOE is working on developing treatment and disposal alternatives and revising policy.
- Over the next year revisions are being made to DOE Order 435.1. The revisions will follow the public process.
- The ARRA funds are accelerating clean-up which results in production of significantly more waste which needs disposal sooner than originally anticipated.
- Contracts are being put into place to deal with treatment of Mixed Low Level Waste (MLLW) and DOE will be issuing a Request for Proposal (RFP) which will be distributed complex wide.
- DOE is also entering into discussions with sites to expand on-site disposal cells and increasing efficiencies of activities at Portsmouth and Paducah.
- The Nevada Test Site (NTS) has some changes scheduled for the near future. They will close the current Low Level Waste (LLW)/MLLW cell as of November 2010. They have been working with the State of Nevada and have received conditional approval to construct a new cell. Pending future decisions and approvals, the new cell could be operational in FY 2011. During the interim between completion of the new cell, wastes will be stored at NTS.
- Waste Control Specialists is a positive for the program. They received their radioactive waste license and will construct MLLW disposal facility in Andrews, Texas. The advantage of the new facility is their license to accept Class A, B, C, LLW and MLLW. DOE is looking forward to use of this facility.
- The Oak Ridge TSCA incinerator has ceased operations. The commercial market did pick up the ball and is able to provide an alternative.
- Currently DOE does not have a disposal outlet for depleted uranium. The Nuclear Regulatory Commission (NRC) is in process of issuing a rule making.
- EM shipments have increased due to ARRA funding. Total EM shipments in FY 2009 were ~7900; during the first half of FY 2010, EM has completed ~8,000 shipments. We expect to see the trend continue through next year.
- The Blue Ribbon Panel is having their second meeting this week. They are to provide a draft report in 18 months and a final in 2 years. DOE is looking forward to recommendations on disposal of HLW and Spent Nuclear Fuel (SNF). The Department is also looking at how to more efficiently deal with tank waste at Hanford and Idaho.
- DOE will continue to move forward and process and create vitrified waste for an eventual disposal facility.
- Greater Than Class C (GTCC) waste right now does not have a disposal outlet and in the next few months (summer/fall) the draft EIS is expected to help DOE move forward for disposal of this category.
- *The Mercury Export Ban Act of 2008* requires DOE to provide storage and long-term management of mercury (non-radioactive) generated in the U.S. A draft EIS was published

in January 2010. Sites analyzed in the EIS are Hanford (WA); INL (ID); Grand Junction (CO); Hawthorne (NV); SRS (SC); Andrews (TX); and Kansas City (MO). The WCS facility in Andrews, TX, is the preferred alternative. The Record of Decision (ROD) is expected later this calendar year.

- On May 14, 2010, DOE issued a solicitation for disposition of ~15,300 tons of classified nickel recovered from uranium enrichment process equipment. The proposals will be evaluated during the summer 2010, and DOE plans to finalize the Site-Specific Environmental Assessment during late Calendar Year 2010. By spring 2011, DOE will Implement Sales Agreement.

In closing Mr. Marcinowski added that DOE has an efficient program which is operating very well on the transportation side and has a goal of zero incidents. He recognized that due to the efforts from all of the stakeholders at the meeting (as well as others), DOE is able to do an excellent job in moving all the material and wants to keep focused on those successes. Mr. Marcinowski thanked all the attendees for their efforts.

Clarifying Question: Jim Williams, Western Interstate Energy Board (WIEB), asked if the GTCC Environmental Impact Statement (EIS) would include reprocessing? Mr. Marcinowski replied that under the Global Nuclear Energy Partnership (GNEP) there were going to be significant volumes of GTCC waste but now that GNEP has a different focus those volumes are no longer considered and have been removed from the EIS.

Dr. David Moody, Manager, DOE Carlsbad Field Office *(slides were used).* Dr. Moody thanked all those within the group who are involved in the Waste Isolation Pilot Plant (WIPP) Transuranic (TRU) waste program. The WIPP project has completed 10 million loaded miles which involved the cleanup of 15 sites, with plans to complete cleanup of two more in the near future. Currently they are shipping lower volumes of waste as they are focused on Remote Handled (RH) waste instead of Contact Handled (CH) waste at this time. A new southern route is being proposed which will be more than 100 miles shorter than the current southern route. WIPP will continue working with stakeholders on that change. Additional points made by Mr. Moody are listed below:

- In FY2010 WIPP will meet or exceed the number of annual shipments made in past years.
- They have cleaned up a number of sites and in June will complete the GE Hitachi Vallecitos Plant in California as well as a satellite storage facility at Lawrence Livermore National Laboratory (LLNL).
- The volume of waste has dropped and they are shipping more difficult waste (hotter waste and bumping limits for weight and wattage) but they are making full use of packages within regulatory limits.
- Underground they have filled panels 1-4 and are half way thru panel 5. They have mined panel 6 and have received regulatory approval to start mining panel 7. WIPP is currently at 40% of disposal capacity.
- WIPP is currently emphasizing RH waste as it needs to be placed into the panels for storage before the CH waste is emplaced. WIPP has lost a few RH holes drilled due to operational impacts, principally at Oak Ridge, which resulted in fewer shipments than anticipated.
- FY2009 and 2010 were, and are, busy years but major milestones with regulators have been met. Every 5 years WIPP undergoes an approval process to demonstrate they are meeting regulatory requirements and all certifications. Every 10 years their New Mexico license and

permits have to be reapplied for and those discussions with the State will begin the first week of June with the intent that new permits will be issued by the end of calendar year 2010.

- WIPP is proud of their drivers and the 10 million loaded miles which have been traveled without release of containment.
- TRU shipments are one of the most inspected programs on the road. Level 6 inspections are completed at origin, and at several ports of entry. The inspections contribute to safe operation and WIPP thanked the audience for the time and effort they put into the program.
- ARRA funds are being used to redo roads on site and WIPP is proposing a new route into the site. They will be engaging stakeholders in the change and once a south access road is complete they will propose that more direct route.
- WIPP has been working on a TRUPACT-III for a number of years. Communications with NRC indicate that approvals may be in place in the next few weeks. Following approvals immediate construction of a fleet of five TRUPACT-III's will begin with the intent to initially use them for shipping Savannah River site (SRS) large boxes. The TRUPACT-III is a rectangular package that would avoid the need to repackage waste in the large boxes into smaller containers to fit into existing shipping containers. Large waste boxes account for about 25 percent of the current TRU waste inventory. In addition, WIPP is seeking approval from the State of New Mexico to use shielded containers for emplacement of selected remote-handled (RH) transuranic (TRU) waste streams on the floor of the repository. The use of the shielded containers will enable DOE to significantly increase the efficiency of transportation and disposal operations for RH TRU waste package. The shielded container is designed to hold a 30-gallon drum, and has approximately the same exterior dimensions as a 55-gallon drum. The cylindrical sidewall of the shielded container has 1-inch-thick lead shielding sandwiched between a double-walled steel shell with an external wall thickness of 1/8 inch and an internal wall thickness of 3/16 inch. The lid and bottom of the container are made from 3.0 inch thick steel. The use of the shielded container will allow approximately half of the remote handled shipments to be made in this configuration.
- Idaho continues to be the workhorse through the Advanced Mixed Waste Treatment Plant (AMWTP) and the Continual Certification Program (CCP).
- Los Alamos also received recovery and base funds for waste certification.
- SRS received ARRA funds to recover and repackage and they plan to de-inventory the site of TRU waste by 2012.
- Oak Ridge National Laboratory (ORNL) uses base funds and ARRA funds to characterize, recertify, and package remote handled waste.
- Hanford is now involved in the CCP and expectations are for Hanford to ramp up shipments as Idaho is ramping down.

Clarifying Questions: Anne deLain Clark, New Mexico Energy, Minerals and Natural Resources, inquired about shielded containers and the reference to improving RH waste shipments to WIPP. Mr. Moody clarified that the volume of waste in a typical shipment has a very small percentage of waste in a 55 gallon drum for dispositioning in a single shipment. The new containers will reduce the number of RH waste shipments by a factor of three.

Jon Neuhoff, Director, New Brunswick Laboratory, DOE Office of Science ***(slides were used).***

Mr. Neuhoff echoed his colleagues' appreciation to everyone for helping with the safety of shipments. The DOE Office of Science (SC) is the country's largest supporter of physical science and engages with EM in disposition and transportation activities. They have six programs within their office. There are 10 national labs and research is performed at 300 universities. All sites follow NRC regulations for shipments. Thirty-five percent of shipments are radioactive materials. The other 65% involve other classes of hazardous materials. The Laboratory is rarely involved in shipments using Type B casks. The High Flux Isotope reactor at ORNL ships approximately 14 times a year to SRS. One shipment of casks from Argonne National Laboratory (ANL) will travel to Idaho National Laboratory (INL) later this year. Additional points made by Mr. Neuhoff are listed below:

- They oversee a wide variety of radioactivity materials and waste at various sites and coordinate extensively with other DOE programs. Office of Science is proactive in stakeholder involvement and sharing of activities and they have a robust internal oversight program for transportation activities.
- The program includes radioactive materials which are associated with research and development from use of check sources up to neutron sources.
- Shipments of samples usually include small low level quantities and materials which are exempt from regulations.
- Waste includes materials from the demolition of old facilities and nuclear materials from consolidation activities at sites across DOE.
- In FY2009 SC shipped 2,900 cubic meters of waste, with Type A shipments being infrequent and Type B shipments being rare.
- SC makes and manufactures medical isotopes, accelerator components, occasional target shipments, activated metals and neutron sources (other activities were covered in the slides).
- Multiple DOE programs fund research and development at New Brunswick Laboratory.
- ANL has stopped some research and waste shipments will be consolidated at Idaho for eventual long-term disposition
- ORNL's High Flux Isotope Reactor (HFIR) fuel shipments have been occurring over past years and are routine shipments. Approval has been received for 12 HFIR shipments in FY2010 from ORNL to SRS
- Argonne is shipping sodium bonded fuel elements to INL for treatment and disposal with one scheduled for fall 2010 from ANL to INL using GE-2000 NAC-LWT cask.
- ARRA activities include demolition activities and moving waste off site.
- Lawrence Berkeley is shipping LLW at about eight trucks per day to NTS.
- New Brunswick Lab ships TRU waste to Idaho and LLW to NTS.
- ORNL is involved in decommissioning activities with the majority of waste going to on-site disposal and a small number of shipments going to Energy Solutions in Utah.
- Brookhaven is disposing of graphite to NTS and the Slac accelerator facility shutdown involves shipments to NTS and Energy Solutions.
- Argonne power reactor is undergoing decommissioning and rubble is being shipped to NTS or Energy Solutions.
- Argonne is also shipping TRU waste to both Idaho and to WIPP.
- There is some stakeholder involvement for low quantity shipments and Brookhaven has special arrangements with the city of New York to move materials.

Clarifying Questions: Anne deLain Clark asked about one of the pictures in the slide which did not look like a TRUPACT-II but the reference was that the shipment was going somewhere other than WIPP. Mr. Neuhoff clarified that there are TRU shipments to both WIPP and to the INL for processing and characterization with some returning after completion of research. All are shipped in TRUPACTs.

Pat Dostie, State of Maine, asked for clarification on consolidated shipments or mixing of the waste streams. Mr. Neuhoff clarified that there is no consolidation of waste or mixing of waste streams.

Tom Beadle, South Carolina Emergency Management, asked about the notification process when shipping waste by air. Mr. Neuhoff responded radioactive material shipped by air by DOE is generally samples (small quantity/limited quantity) and isotopes (Type A or B) and was not aware of any DOE program offering radioactive waste by air. Shipment by air necessarily requires prior/subsequent highway transport, so if notification was required, it would be made, regardless of the mode of transport. In the event of an incident involving any hazardous material shipped by air, the incident reporting requirements under DOT and DOE would be invoked, as required.

Ahmad Al-Daouk, Director, National Security Department, National Nuclear Security Administration (NNSA) (***slides were used***)

NNSA shipments are predominantly by truck and originate from decommissioning of facilities. NNSA is also involved in the Global Threat Reduction Initiatives (GTRI) to identify, secure, remove and/or facilitate the disposition of high risk vulnerable nuclear and radiological materials around the world, as quickly as possible, that pose a threat to the United States and the international community. They are involved in a program for switching reactors from highly enriched uranium (HEU) to low enriched uranium (LEU). Additional points made by Mr. Al-Daouk are listed below:

- The Off-site Source Recovery Program (OSRP) is managed by Los Alamos National Laboratory (LANL) and is designed to remove excess, abandoned or orphaned radioactive sources. Their mission was enhanced after 9/11 and moved into NNSA from EM. The recovery includes beta and gamma sources. OSRP has recovered 23,000 sources from more than 800 sites.
- The majority of the waste shipments originate from taking down old facilities, some shipments involve contact handled TRU waste and NNSA coordinates with EM for those.
- The Office of Secure Transport (OST) is within NNSA. They are involved in the transport of weapons and weapons related components and have traveled over 100 million miles safely.
- The excess material consolidation integrated project consist of the following:
    - Excess HEU – Of the Department's total HEU inventory, 374 MT has been declared excess to the needs of the nuclear weapons program. Up to 180 MT of this excess material has been reserved for nuclear programmatic uses, such as naval propulsion, research reactors, and isotope production reactors. Most of the remaining excess material will be downblended to produce low-enriched uranium for use in power-generating reactors. NNSA has moved roughly 100 metric tons of material reserved for medical purposes.
    - LLNL shipments of highly enriched uranium and plutonium are scheduled to be completed by 2012.

    - The last shipment of SPR (Sandia Pulse Reactor) Plates to SRS for reprocessing into H-canyon has been scheduled.
    - Disposal of excess plutonium from Hanford was completed in 2009.
- GTRI initiatives are included as a part of the defense non-proliferation program to remove or facilitate the removal of materials across the United States and internationally community. Since 2004 eighteen research reactors have been converted from HEU to LEU and five have been shut down in Idaho and internationally.
- A shipment from Chili during the recent earthquake was successful in bringing fuel back to the United States.

Clarifying Questions: Tom Beadle asked if there was any mixed oxide (MOX) fuel left and if so how did DOE intend to use it? Mr. Al-Daouk clarified that SRS has a MOX facility scheduled to go on line but at this time he does not know of any other MOX facilities. Mr. Beadle restated the question to "Are there any power plants in country that will use MOX?" Mr. Al-Daouk replied that yes that is where NNSA hopes to send it.

Jim Wade, DOE Office of Nuclear Energy, Packaging and Transportation. ***(Slides were used)***
Mr. Wade thanked the panel for doing most of his presentation then explained that for the most part Nuclear Energy (NE) ships spent fuel through the Foreign Research Reactor (FRR) Program. The FRR program has been in operation since 1996. Most of the used fuel outside the United States comes into SRS and some is then shipped by truck to the INL. There is only one reactor left with HEU fuel and it is located in Mexico City. NE plans to ship that fuel back to the United States in 2011. NE is also responsible for Domestic Research Reactor (DRR) shipments. DRR shipments are conducted according to NRC requirements because they are originating from NRC licensed facilities. FRR shipments are conducted according to DOE regulations. The Used Fuel Disposition Program is being established in NE and they will handle the responsibilities that were previously handled by the Office of Civilian Radioactive Waste Management (OCRWM). Additional points made by Mr. Wade are listed below:

- To date the FRR program has completed seven east coast shipments and one west coast shipment based on the GTRA initiative. Most shipments went to SRS and one shipment was received at the Concord Naval Weapons Station in California and was then shipped by rail to INL.
- FRR was a 10 year program that was originally scheduled to run from 1996 to 2006 with completion scheduled by 2009. The program was extended by 10 years in order to continue removing HEU from around the world. The program is currently scheduled through 2019.
- DRR shipments include many university shipments. Plate type fuels go to SRS and aluminum based fuels are shipped to INL.
- OCRWM is going away and their duties are being transferred to NE. The Used Fuel Disposition Program has established the *Fuel Cycle Research and Development Program* to work on those duties. Mr. Wade emphasized that he is not the contact on that program but he included their slides for information purposes and invited questions which he would attempt to answer.

Discussions from Opening Plenary: Transportation Across the DOE Complex:

- Scott Ramsay, Wyoming Office of Homeland Security, noted that the speakers had referenced the openness of shipping campaigns but Scott would like to hear a DOE commitment (as Wyoming is a non-agreement State) that when DOE ships from Brookhaven and other facilities they will notify the States of those other shipments. The stakeholders think of DOE as one family and not all the different offices represented by the panelists. He praised WIPP for their openness and interactions with stakeholders and asked how will other DOE programs come together and openly share information? Mr. Al-Daouk noted that by attending regional meetings and having the different offices represented at those meetings they would be sharing information and keeping stakeholders informed of what is coming up. Mr. Wade added that from the NE offices they communicate upcoming shipments by providing input to the Prospective Shipment Report (PSR) and that report is shared with the stakeholders periodically. The PSR serves as a single communication tool for gathering and providing information. Mr. O'Connor suggested that the topic of communication would be a good topic for an ad hoc working group. Mr. Neuhoff added that DOE may want to consider more meetings with communities and continue working with forums such as NTSF so info can get out there.

- Moderator Ken Niles had several questions which were received from note cards from the audience about how do all the DOE programs coordinate their information? Mr. Neuhoff stated that extensive coordination with stakeholders occurred through local site offices and through HQ as well as up the line from the site contractors to DOE. Mr. Al-Daouk added that the eight NNSA sites all have EM offices and there is a lot of coordination between NNSA and EM for transportation activities. For sealed sources it may be good to look at cross organizational coordination again but recognizing that there are thousands of those shipments all across United States. Mr. Niles asked if DOE was ever caught by surprise by what other DOE departments were shipping, to which the panelists all indicated there were no surprises.

- Tim Runyon, Illinois Emergency Management Agency: Homeland Security is funding programs like secure cities and there are dollars out there for radiation detection equipment and portal monitors. Is there any coordination being done under those programs so shipments are not picked up and stopped by the remote detection States now have? Mr. Wade answered that DOE does have escorts and secured routes so from a security perspective the coordination includes briefings up front with State security and others so he does not expect that would happen. Mr. Runyon followed on with a note that for commercial and for most DOE shipments that is okay but what about other shipments such as those made by the OST which may be picked up by the monitors? Mr. Al-Daouk responded that there is coordination to help programs know exactly where the monitors are and they have increased communication so States know what is transported.

- Sally Jameson, National Conference of State Legislatures, (NCSL): In relation to the NTS cell that would close and the timeframe for that closing, could Mr. Marcinowski expand on that? Mr. Marcinskowi, stated the agreement with Nevada is the current cell would operate for 5 years which ends in November. The new state of the art cell now being constructed may not be available for a few months after that. In the interim they have conditional

approval from Nevada to continue storing the waste at NTS.

- Audience question: What is status of WIPP updated plan? The WIPP Transportation Plan has been updated and should be ready within the month and will go out to States for review.

- Audience question: Will shipments drop off after FY2011 when stimulus funds are gone? Mr. Moody replied that yes they will decline, but WIPP will sustain the momentum as much as possible. Mr. Marcinowski added that for other programs there will be a drop off as cleanup is completed.

- Audience question: What is DOE planning while waiting for the Blue Ribbon Commission recommendations? Mr. Marcinowski stated the near term impact to EM operations is negligible as under the old plan Yucca Mountain would not be operational for 10 years, so current activities have not needed to be amended and operations will continue as scheduled.

- Audience Question: In answer to a question from the audience Mr. Marcinowski clarified that the HLW being produced in glass matrix form was only designed for disposal purposes and the economics on trying to retrieve that material from the matrix is prohibitive. The Department is managing types of SNF which will lend itself more to reprocessing.

- Audience Question: Is there transportation planning occurring under NE now that it assumed the OCRWM work? Mr. Wade replied that this is a new effort and there is effort to determine what activities NE should start with in FY2011 and where transportation fits.

- Mr. Al-Daouk asked about HLW being turned to glass to meet the Yucca Mountain acceptance criteria. Will the acceptance criteria change at the new disposal facility? Mr. Marcinowski replied that he could not see the waste acceptance criteria that would include glass. It is a very robust form but he is confident that the waste form produced will be acceptable with whatever disposal is determined.

- Ken Niles asked about disposing of HLW at WIPP to which Mr. Moody replied that with vitrification the Department is thinking about how that may impact the Waste Acceptance Criteria (WAC) for WIPP. Mr. Moody added they are comfortable with current position and will wait for Blue Ribbon recommendation before taking any action to change WIPP's mission. If there is a move to dispose in salt then they will provide all information they have on operations during the last 10 years.

- Bill Craig, Utah Department of Environmental Quality, asked a question of Jim Wade to clarify DOE's role in both FRR and DRR shipments. Does DOE provide funding for DRR shipments? Mr. Wade replied that DOE has no oversight of DRR shipments but DOE always owns the fuel provided to the universities. DRR fuel returns are the responsibility of the universities to ship the fuel back to DOE under NRC rules. Ken Niles then asked if Mr. Wade was saying the universities are to match protocols that States are using to deal with DOE shipments. Mr. Wade clarified that universities agreed to NRC rules to operate and manage fuels used in their research. If there is something that States need then they should ask NRC for a rule change. DOE does not get involved in asking NRC to change their rules.

Mr. Wade acknowledged that DOE does go above what is required by NRC but that they cannot dictate to universities that they do the same.

- Lisa Janairo, Council of State Governments/Midwest (CSG/MW) asked that Mr. Marcinowski comment on the status of spent fuel transfers between SRS and INL. Mr. Marcinowski replied that there was a decision to do a fuel swap between SRS and Idaho and DOE is evaluating that decision but has not made a revised decision at this time. Those swaps are on hold and they are not proceeding at this time until they complete their evaluation. A decision prior to the end of this year is anticipated.

Session: Expectations for the National Transportation Stakeholders Forum

DOE and its State and Tribal stakeholders were asked to take this opportunity to explain their expectations and how they hope to benefit from the NTSF. Panelists and the audience were encouraged to discuss possible topics to cover at future meetings or webinars, as well as ideas for topics that might warrant the formation of ad hoc working groups. Steve O'Connor noted that the presentations will be on the website and some handouts were provided by presenters and were available on the table outside the room.

Ray English, DOE Naval Nuclear Propulsion Program, moderating. Mr. English began the session by noting that the root of conflict and discontent is unfulfilled expectations, which is why this topic is so important. We need to make sure goals and visions are realized. The NTSF charter says the group will bring transparency and openness to DOE transportation activities. The three goals are to 1) inform States and Tribes; 2) obtain input from States and Tribes; and 3) identify emerging issues for DOE and stakeholders. We should keep these goals in mind as we conduct this panel. Mr. English was involved in TEC since the 1990s and has been fulfilled by the experience of working with stakeholders. He has confidence that if there were a shipping incident, it would be handled well. He provided an introduction of the panelists.

Willie Preacher, Director, Shoshone-Bannock Tribal DOE Program: I think the expectation that Tribal stakeholders have is to be treated as sovereign nations. Mr. Preacher had participated in TEC, and experienced that communication was at the very end of the process. Lately he sees a trend towards more communication. The Tribes have been identified as people who work with the sites. TEC included the Tribes along shipment routes. The NTSF may have been remiss in identifying all of the Tribes. Tribes may not know what is being shipped through their lands. The Tribes would like to see early communication and government to government communication. The Tribes want to know what types of shipments are coming through their lands and what the risk is to the responders. Some Tribes do not have response capabilities and need training. The Shoshone-Bannock Tribes see a lot of shipments from Idaho, and may see more. In Idaho Tribes have good information on what is going to be transported because they have a good working relationship with the Idaho National Laboratory site. The Idaho settlement agreement requires TRU waste to be removed by a certain date. The biggest expectation is to be notified. They have a communication network established but DOE has gotten away from notifications. The Tribes know what will be leaving Idaho; they now want to know what is coming in. The emergency response team should be notified. Another expectation is for DOE to know who the Tribes are, and what their treaty rights are. They have presented this to DOE in the past, but would be willing to do this again in the

future. Each Tribe could present. If there is a shipment coming through Tribal lands, they should be considered an affected Tribe. Tribes stopped a shipment in Idaho in 1995 and that is when DOE started to engage with Tribes.

John Sattler, DOE Consolidated Business Center: Mr. Sattler spoke to the perspective of the DOE sites. He is out of the EM Cincinnati Business Center, but has spent his career working on sites, most recently Brookhaven. He also worked on the Fernald shipments to Energy Solutions. They performed a lot of outreach to stakeholders. Brookhaven graphite reactor shipments are occurring now. He has worked quite a bit on stakeholder outreach. He contemplated the lessons learned from stakeholder interactions. One important lesson was when he was planning Fernald shipments. They thought they had a good program and shipments were going well. In 2006 there was an accident with one of their trucks. The contractor moved the canisters onto a new truck. The State of Missouri was dissatisfied with how that was handled. A State person prepared a paper on their discontent on routing and communications. He realized that they hadn't met the State's expectations or their own. Mr. Sattler noted that many times you don't always know if you are doing a good job.

Representative John Heaton, New Mexico: WIPP is in Representative Heaton's district so he has been involved in WIPP transportation from the start. Most of what we think about related to shipments has to do with where SNF will go. There is much more volume and complexity to DOE transportation, as we said in the previous panel. There is a lot of coordination within DOE and within the State, as well as between DOE and the State. WIPP has been discussed as the prototype program. Shipments are the most visible activity conducted. WIPP has a safe shipment track record after 11 years and more than 10 million miles. They have wondered what else they could do to make it even safer. They had a hard time coming up with anything. NRC and DOE have been very receptive. The idea of having this integrated group who are involved in transportation makes a huge difference. There is pushback every time WIPP tries to open a new route, but once the local community negotiates, they generally find an acceptable arrangement. WIPP has made their vehicles and drivers safe, which contributes to the safety of the system. Most States have either a plant or a research lab, so they have some stake in transportation. We don't know where the waste will go, but there will be a new site. Representative Heaton believes they will pick a medium, and the medium they will choose is salt, once it is reprocessed. The NCSL Working Group expects to see interim storage. The next step is to understand where TEC has been and digest that to understand where we don't need to reinvent the wheel.

Moderator Ray English added that it was good to think about where TEC had good achievements and what we do not want to repeat and where we need to change.

Tim Runyon, Illinois Emergency Management Agency: We should start out with big expectations. The States are where the rubber meets the road, and they have contact with the actual shipments that DOE conducts. It is not unreasonable to have high expectations. Tim has three expectations: 1) two-way communications, which includes people high in the DOE management chain as well as site staff who have detailed information, 2) input on policy decisions: this was a success of TEC 180(c) working group and, 3) transportation planning, which includes shipment information and details of upcoming shipping campaigns so the States can plan for staffing. The State regional groups had solicited input from States on their expectations. The States responded to the survey by saying they would like to benefit from NTSF by:

- receiving consistent info,
- collaborating with States nationally,
- using opportunities to engage with other DOE offices,
- receiving financial support for impacted States to offsite shipping costs,
- including regional groups in the NTSF meeting planning,
- using regional groups to disseminate information

Mr. Runyon noted that one of the advantages of TEC was the opportunity to interact with industry. Is that a Federal Advisory Committee Act (FACA) issue, or can it be incorporated into NTSF? Steve O'Connor pointed out that a conscious decision was made to exclude industry to preserve the relationship between DOE and the stakeholders.

Steve O'Connor, DOE/EM Office of Packaging and Transportation – ***(only one with slides)***
DOE's expectation is to improve clarity of DOE communications and coordinate better with DOE offices. They want EM to be the focal point for communicating with stakeholders. Offices tend to be "stove piped." The PSR is the tool to communicate, but that needs work. The Northeast is working with Brookhaven on shipments that face local opposition. There needs to be more communication with Tribes. Mr. O'Connor emphasized that he definitely heard Mr. Preacher about how they need to do a better job with Tribes. Looking at affected Tribes, but definition is not same as one used with TEC. If DOE shipments cross, or are adjacent to, or if Tribes are first responders along a DOE route, then DOE needs to make sure they are engaged. DOE is suggesting that Tribes assist, as best as possible, to disseminate information from NTSF to some of the smaller Tribes. They need a good vehicle to disseminate information to the Tribes. This needs work and could be a topic for an ad hoc group. The EM Office of Packaging and Transportation sent a survey to 62 stakeholders in January 2010. The respondents want to see improved communication and timeliness of information inquiries. Leads were assigned to each issue to make sure that they get resolved. DOE knows there is room for improvement. The theme he has heard is that States/Tribes want more communication on what is traveling through their jurisdictions, even if the shipments are not of the magnitude that is in the Manual.

Discussions from Expectations for the National Transportation Stakeholders Forum

- Bob Halstead, State of Nevada, Agency for Nuclear Projects: From Nevada's perspective, they would like to think of themselves as an ex-host State for a repository. Nevada's expectations revolve around why WIPP has been a good model.
  1. State, Tribal, local participation throughout the process
  2. Federal agreement to pay for extra regulatory requirements and safety enhancements
  3. Full-scale package testing
  4. Whoever carries out national transportation planning should have a Congressional mandate for cooperation
  5. How to get the right people together, and bring adversaries together

  Mr. Halstead also noted that yesterday he listened to the Blue Ribbon Commission webcast and Representative Domenici said WIPP has had no accidents. This is not true.

- Don Greene, Arkansas Department of Health: Stakeholders have an expectation to ensure DOE knows regional groups play an important role in the process. At the end of TEC, the role of the regional groups diminished. Mr. Greene wants the regional groups to be funded and play a key role. They are not mentioned in the NTSF charter. Past funding issues creates a perception that DOE is trying to cut regional groups out of the process. Mr. Steve O'Connor stressed that was not intentional but regional groups were implied as part of the States/Tribes mentioned in the charter.

- Rick Moore, Eureka County, Nevada: TEC included a number of member organizations as proxy for other representative governments who were truly the responders (police, fire, nurses) and those are not included in NTSF. States should be sure to coordinate with locals, and ensure that their concerns are met. Mr. English wondered if it was reasonable to expect that States will communicate with locals. Mr. Moore replied that yes it was unreasonable to have DOE do local government interactions but learned from WIPP that it was imperative for DOE to reach out to locals on new route openings.

- Ken Niles: TEC consistently did not treat the DOE/stakeholder relationship as a true partnership. DOE was not collaborative enough in terms of planning the agendas and scope of the TEC meetings. That was a failure. We all want DOE to succeed with transportation, so DOE should promote cooperation. The strength of TEC was that some of the Working Groups succeeded in completing their missions (180c, Practices Manual, draft public information materials). Ken added that the strength of TEC was that it put stakeholder members to work noting that a core group is still willing to fill that role. Mr. O'Connor said that we must stay away from the policy issues and be careful with FACA concerns. NTSF needs to be a forum of information exchange and so they cannot make this a policy/decision making forum. Keep communication, collaboration and coordination as effective as possible. Representative Heaton commented that one thing of concern is the civilian fund which is absolutely a disaster. Need to think very carefully about how to move forward with the right appropriations strategy.

- Mark Yeager, State of South Carolina: The State is where point of origin inspections and emergency response occurs. Locals and Tribes are actually the first responders. He has noticed that NRC regulated shipments and DOE shipments are very different in terms of the attention that is paid to the States and Tribes. Lots of LLW shipments occur without State knowledge. NRC licensees, DOE shipments, and national security exempt shipments all fall under DOT regulations. He recommends that an ad hoc group be created to develop a Modular Emergency Response Radiological Transportation Training (MERRTT) module on Class 7 materials and define the differences. These modules would be given to emergency responders so they treat each incident appropriately. Responders don't know how to approach a placarded vehicle. They need additional training and information.

In closing Mr. O'Connor noted that we could model the current activities after the WIPP model. WIPP has their own carriers and provides oversight. DOE conducts evaluations of the rest of carriers within the complex and provides oversight. The rest of the DOE shipments have a good safety record as well. The vast majority of shipments are low level waste and they are incident free. Some States have issued notices of violation to a shipping site, and sent a copy to the DOT

Inspector General. Mr. O'Connor asked that in addition to a copy to DOT, that a copy of any letter of violation also be sent to him so DOE can be involved up front.

Afternoon Session - Federal Agency Partners

Representatives of the U.S. Nuclear Regulatory Commission, the U.S. Department of Transportation, the Nuclear Waste Technical Review Board and the International Association of Fire Chiefs provided NTSF participants with information about specific programs and initiatives that have the potential to affect State and Tribal engagement in radioactive materials transportation. William Spurgeon, DOE/EM Office of Packaging and Transportation, moderating.

Mark Abkowitz, U.S. Nuclear Waste Technical Review Board (NWTRB): The NWTRB is a federal agency but one of the smallest with a significant role in what is happening now and in the future in the role of SNF. The Board's role enacted by congress is to be an independent evaluator focused on the activities that DOE conducts with SNF and HLW (including commercial and defense related fuel). The Board reports findings to the Secretary of Energy but they do not have any enforcement authority. NWTRB came into being with the Nuclear Waste Policy Act (NWPA) in 1980's with a misperception that they were the Yucca Mountain Board but that is not the case with regard to their mission. Though Yucca Mountain is in peril it does not change the role the Board has in going forward. The Board has eleven members appointed by the President who are vetted through the National Academy of Sciences (NAS). Members serve a 4-year term which is renewable with most serving two terms in a part time capacity. Some are retired and Mark's day job is as faculty at Vanderbilt. If you have particular views about DOE do not make NWTRB part of the equation. Typically the Board has 2-3 public meetings per year with smaller meetings on specific topics and fact finding. Mr. Abkowitz expresses appreciation of those in audience who have helped on NWTRB activities. The U.S. program is in transition and clearly we are all taking a step back and figuring out where to go. License application was accepted for review, administration is working to remove Yucca Mountain from the landscape as a disposal site. License withdrawals for water rights and other actions are taking place simultaneously. Duties have been transferred to other agencies. The Blue Ribbon Commission was formed and is having their second meeting this week. Reference has been made to the Blue Ribbon Commission as the group to announce a solution to the quandary we are in, but in a broad sense they are being asked to consider a lot of things in a short amount of time including fuel cycles, SNF storage waiting for a pathway, recycling, reprocessing and recognizing that we will still need a permanent repository of some kind. They are looking at how the program is managed and how the financial models will work. Most importantly the Blue Ribbon Commission has been asked to suggest changes to the NWPA. The Act is so limiting in language so we don't have an ability to exercise flexibility to solve problem. The Commission's report is due in 2012.

NWTRB has had conversations at both the chairman and directorate levels and collaboration is forming so they will not try to reinvent the wheel but look at what is out there. NWTRB feels it is important to have an objective system analysis tool available to help solve issues and they are developing the NUWASTE tool. For NWTRB the 1) integrity of package and 2) integrity of the fuel are the two most important issues. What happens when we start to move these things? There are a number of international programs being looked at which have been favorably reviewed and a

report is available metlay@nwtrb.org or go to the NWTRB site to download that report. A follow-up report is being developed about the value in going forward in the SNF area. Also they are watching what DOE is doing in the area of SNF and looking at the issues regarding containers and their ability to withstand certain events.

The NUWASTE tool is designed to recognize the scenarios, and comment on types of waste located in places and what needs to be done to move those waste streams somewhere else. The trick is in considering 3 major concepts (direct disposal, dry storage, reprocessing) and how to carry out those activities for the next 60-100 years. Reprocessing has a variety of return implications. NUWASTE process operations and material flow looks at fuel cycle, new fuel to enrich, how to contain and put into plants, and then options to manage the waste. Depending on capacities and locations and interim storage there are a variety of options on how to manage things. They have not released any results from NUWASTE but several applications have been run and NWTRB is discovering once-thru is about as good as you can get to limit the number of poisons that get introduced. They are considering dry storage if no repository is available. They have looked at reprocessing without disposal and as a combination of those things. They are looking into vitrified waste though concerns with how much HLW you can put in a canister once it has been vitrified has a great impact on how much waste you want to reprocess. Some cases show more HLW to dispose of than you would have had in SNF to dispose of prior to reprocessing. Also considering transportation logistics of each scenario. Future shipments may become heavily laden with transportation requirements.

- **Audience Question**: How do you see the NTSF and the NWTRB relationship as being most productive? Mr. Abkowitz replied that first it is important to be here and share what is happening but also to hear what issues you think are important and to keep an open culture. The board prides itself on being open. They invite our participation in Board meetings, and would like to continue attending NTSF meetings.

- **Bob Halstead:** Nevada recommended the Commission take advantage of resources from the past. Mr. Halstead posed a question on NUWASTE scenarios and issue of route selection as it is difficult and controversial – is the Board looking at running potential route maps? He suggests all route maps should be draft. Mr. Abkowitz noted that the Board is not interested in routes at this stage but they are interested in order of magnitude such as what would the impact be if two reprocessing facilities, one in east and one in west, were identified. Mr. Halstead cautioned that the panel be careful in the way they use projections such as route miles and other data as the basis for calculations will be questioned.

John Woulfe, International Association of Fire Chiefs: National Hazardous Materials Fusion Center: The National Hazardous Materials Fusion Center mission is to enhance hazmat responder safety and improve systems for responders. The Center is currently involved in 1) data collection, 2) data analysis, and 3) data assimilation. They are activating a secure web portal and members will be able to access hazmat response information, as well as add information on responses they are involved in. Regional Incident Survey Teams (RIST) have been established and align with the PHMSA regions. RIST will come in and review the incidents and look for good practices used during the response. Information on the website is scrubbed to maintain integrity of data and still be anonymous. The Center will also provide a site for memorandums of understanding (MOU's), best practices, etc. Data Analysis will come back through the International Association of Fire

Chiefs (IAFC) and PHSMA will look at equipment issues, lessons learned, and specific information to determine exactly what happened and where improvements could be made or best practices identified. Data assimilation will identify additional best practices with details available to members and summaries available on the public website. The website is at www.hazmatfc.org. To access as a member you need a sponsoring agency so they can keep track of who is going into the portal. Currently getting 200 hits with many from outside the country hence the secure system. RIST has completed 10 surveys. Brochures were available on the handout table.

Michael Conroy, Radioactive Materials/Office of Hazardous Materials PHMSA/DOT
In 2004 there was major rulemaking in radioactive materials area to harmonize with the 2000 edition of the International Atomic Energy Agency (IAEA) regulations. The 2000 version of the IAEA regulations was adopted domestically in 2004. IAEA has a 2003, 2005 and 2009 edition of those regulations and DOT needs to look at those changes and determine what they want to adopt. They are also looking at fixing other miscellaneous problems to clarify, update, fix typos etc. DOT and NRC will issue their rulemakings simultaneously to avoid conflicts. DOT is planning on a 2011 notice of proposed rulemaking. Meanwhile things proceed at IAEA as they consider additional changes beyond 2009 including minor and editorial changes with a few changes re: fissile materials being more substantive. DOE is not proposing to adopt those changes in 2012.

A number of letters of interpretation have been written on placarding and Low Specific Activity (LSA) Surface Contaminated Objects (SCO) questions mainly dealing with marking, labeling, placarding and some regarding bulk packaging. PHMSA is adjusting their registration and fee assessment program. Other changes can be reviewed at the PHMSA website at www.phmsa.doe.gov/hazmat.

Earl Easton, U.S. Nuclear Regulatory Commission: A version of this group has been meeting for 20 years and the way commercial shipments were structured was for DOE to take ownership at facility and transport for disposal so consider if the structure changes stakeholders may be dealing with multiple shippers.

The NRC does not make policy but they make sure that policy is implemented safely and that it will include the back end of the fuel cycle. NRC is looking at how implementing activities for disposal and all regulations have been geared to Yucca Mountain and if Yucca is not the case then a lot of regulations and guidance need to be rewritten. There are two individuals from NRC who deal with reprocessing and they will work on regulations for reprocessing.

In the area of transportation one prospect is that we will be going to long term storage up to 120 years. There are gaps in security requirements and knowledge but NRC will be spending time making sure regulations for back end of fuel cycle are integrated. Finally, as NRC moves forward there will be many opportunities for stakeholders to participate as they change regulations, guidance and the way they do business.

Communicating with States and Tribes about Shipments

In this session, panelists talked about the kind of shipment-related information Tribal and State officials need, how they use that information, the challenges DOE programs might face in providing what the States and Tribes request, and possible ways to overcome those challenges.

Melanie Rasmusson, Iowa Department of Public Health, moderating.

Neil S. Weber, Director, Department of Environmental and Cultural Preservation, Pueblo of San Ildefonso: Mr. Weber has been attending DOE meetings for many years. Technology has advanced, and DOE communications with Tribes has improved. Communications is important to Tribes. They are not stakeholders; they are sovereign nations requiring government to government consultation. DOE has a Tribal Policy. There are 564 federally recognized Tribes. The Tribes are concerned with shipments across their lands or near their cultural sites. Tribes want not only notification of waste shipments, but notification of materials going to research facilities and secure shipments. It is considered a cultural and religious insult if shipments of these materials happen during feast days or during Tribal activity days. Some DOE sites will halt shipments during those days. Tribes are concerned with transportation in their vicinity through or near their lands and their sacred lands. The Tribes want communication on timing and location of DOE routes. DOE needs to communicate with each and every Tribe regarding timing and location of all shipments and notification of incidents no matter how small. In many incidents it may be days before the Tribes are notified. DOE needs to understand treaty rights and the governments trust responsibility to Tribes. San Ildefonso borders a DOE facility and the agreement for the first WIPP shipment was to go down a highway that would not cross Tribal lands and the truck drove out of LANL made a wrong turn and went right across a sacred area. Overall message is that the Tribes would like greater communication on all materials being shipped across Tribal lands.

Jim Wade added that FRR planning does include timing shipments around Tribal and State events.

Delegate Sally Jameson, Maryland – for National Conference of State Legislatures (NCSL): State Legislatures are where the rubber meets the road. DOE is communicating with governors and State agencies but if one of the State constituents sees something on the highway they do not think about going to the web but they will pick up the phone and ask the Legislators what do you know? The Legislators would prefer to have answers. So where the NCSL can be utilized is for DOE to understand that NCSL is at the top of the tier and can disburse the information nationally. NCSL has the contact with Senators and Congressmen and can keep them apprised. Important for NTSF group to know as they consider routes for shipments is that it would be great to call NCSL in the beginning so they can be a part of the entire process. NCSL believes there is an opportunity to build on the relationship among all the groups. CSG does good work too, but we need to promote partnerships because we reach different constituents. Opportunity can exist by building on the relationships that the groups from across the country can give.

Neil Weber echoed that communication through STG/WG and other forums with the NCSL has been very beneficial. Ms. Jameson added that NCSL speaks with one voice because they have policy statements.

- **Audience question:** For Neil Weber: Do States notify Tribes of shipments which are other than DOE shipment? Mr. Weber replied that Tribes do not receive any notification from States. In reply to a follow-on question regarding a list of Tribes, Mr. Weber replied that yes DOE should have a list of all the contacts and the emergency response contacts for all the Tribes.

  Jim Wade added that all notifications go to the Governor's designee and it is DOE's thought

that States would then notify the appropriate entities within the State including Tribes. The NRC requires only State notification but if it is a DOE activity the Tribes will be notified.

Bill Craig shared that the States don't typically notify the Tribes as there is a NRC legal issue which does not allow the Governor's designee to go outside their own organization to notify other organizations.

Lieutenant Bill Reese, Idaho State Police: Idaho has a few shipments now and then and we are shipping more to WIPP than any other State. The WIPP program in Idaho is running very well. They did experience initial bumps in the road from DOE or Idaho expectations which were not conveyed adequately. When dealing with DOE there are different factions of DOE and you need to know who they are and have a relationship with each of them. If you don't have open lines of communication, you are likely to have issues with transportation. States with lots of WIPP shipments are used to one way of doing things so when it is a different shipment like DRR, then the expectations do not always transfer to different shipments. After 9/11 rules added escorting and DOE told the State that they needed to escort the shipments. Idaho does not do escorts. You need to deal directly with your point of contact, and negotiate if you don't receive the answer you want.

Those who do inspections use the WIPP eight-week rolling schedule. Policy people don't use that as much. Only 30% of respondents to the regional group survey said that they are getting information consistently. Survey respondents overwhelmingly liked meetings (85%) because questions are answered and key decision makers are present. This also builds trust and relationships. States would like to see DOE adhere more closely to the eight-week rolling schedule and provide better notification of changes. The relationship with contractors at shipping sites is also essential. Two way communication and trust are key to resolving problems. Routing can be an issue for States that have multiple routing options. If shipping by rail in Idaho then other contacts need to be involved as Idaho State Police does not monitor rail. Meetings in general are desired as questions can be answered and updates from DOE received. It is important to have key decision makers at the meetings and hear what is said as that helps build trust and relationships. The PSR is important to be able to build budgets. Be aware of sensitivities when shipping through areas you have not shipped through before. There are so many shipments from Idaho we expect changes but those States who have one or two shipments per week have significant impact when people are scheduled and shipment is canceled. The most important approach is through communicating and building that trust.

Jim Wade added that a lot of the situations we have heard about have been planned for. DOE provides input and communication to Tribes. He has been doing shipments a long time, and he forgets that he is an expert. He realizes that you need to take time to explain the process to those who are new and remind yourself that this is not routine for everyone. When DOE develops plans, almost every situation is planned for. Rules and requirements are there and need to be adhered to.

Ella McNeil, DOE/EM Office of Packaging and Transportation: In preparing for this session, she sought to define transparency and found the definition in the Government Executive magazine: to share relevant information in a way that is timely and valid. In addition, it involves sharing the reasoning and intent underlying the statements, questions, and actions (e.g., when you make a decision, you explain your reasoning. In DOE it can sometimes be difficult to explain the reasoning, but this is an area we can strive to improve. One of the outcomes of TEC was DOE

Manual 460.2-1, Radioactive Material Transportation Practices Manual. Many DOE program offices were involved in the development process, along with the members of the Protocols Topic Group under TEC. Because the Manual was issued through the Directives process, all of the program offices concurred. One section in the Manual is on communications and discusses a graded approach depending on what material is being shipped. The PSR comes out twice a year. Last fall DOE received a lot of comments from States. To address the comments, changes are being made to add a column to the PSR stating whether the shipment is placarded (Class 7, radioactive). We have also added a column to list the anticipated start and end dates for the shipments. Another tool that can be used to identify potential shipments is the Waste Information Management System (WIMS) at http://wims.arc.fiu.edu/WIMS which is updated on an annual basis. Each site identifies their waste streams for disposal and provides their shipment projections. The challenges that DOE faces includes getting the information from field sites, and determining what information States and Tribes need, and how that information is used. EM frequently experiences delays in shipments, i.e. Portsmouth/Paducah. There are security concerns with classified shipments, so information to States and Tribes will be limited. The graded approach is preferred, as we don't want to treat LLW the same as SNF. Another communication tool is the Transportation Emergency Preparedness Program (TEPP) which includes emergency responder training and outreach providing tools and resources for those people where the rubber meets the road during a response.

- **Audience Question:** What communications with Tribes has been put in place for hospitals or other non-DOE sites? Mr. Preacher replied that issues regarding shipments via common carrier and for medical isotopes being shipped to hospitals, the Tribes do not receive any notifications. One of the reasons his Tribe stopped the shipment from Fort St. Vrain to Idaho was because DOE had a settlement agreement and the State made agreement to ship waste but the Tribes were not notified of that decision. They were concerned that the State could make and agreement to ship through Tribal Lands. They stopped the shipment to find out what was being shipped. That was the initial event that improved communications between DOE and the Tribes.

  Sue Loudner, Pueblo of Acoma added that she receives reports from the State Department of Homeland Security about shipments coming through Tribal land and for WIPP shipments and cobalt shipments from Canada.

  John Stanfill, Nez Perce Tribe, added that some States don't recognize a sovereign entity within their State or consider them significant enough to be notified. Tribes need to be notified directly by federal agencies.

  Kevin Leuer (MN) stated that he would like to see Department of Homeland Security included in these conversations adding that there is also a need to integrate the intelligence community.

Ms. McNeil concluded by referencing a handout in the packets and said to get answers to questions of DOE Packaging and Transportation go to ASKPAT@hq.doe.gov, or be sure to visit the EM website at: http://www.em.doe.gov/Pages/EMHome.aspx.

Enhancements to the DOE Transportation Emergency Preparedness Program (TEPP)

As TEPP has matured, significant changes have been made to the program. This presentation addressed the enhancements that have been made based on user feedback, partnerships, and reviews, and talked about other changes on the horizon.

Tom Clawson, Technical Resources Group, Inc. *(slides were used)*
Tom Clawson is a contractor to DOE TEPP and provided an update on where TEPP is and where it is going. The need for a program to address transportation emergency preparedness was identified in 1988. In 1989, EM was established and TEPP became a funded program to address emergency preparedness concerns of shipments to WIPP and other planned shipments. TEPP is part of DOE's overall comprehensive emergency management system.

In approximately 2001 the WIPP training program merged with TEPP's program. In 2005 TEPP looked at National Fire Protection Association (NFPA) 472 standards and competency for a radiation specialist. They found that the competencies were not attainable so TEPP worked with the Radiological Awareness Program (RAP) training and found that NFPA needs not covered in RAPTer training so they worked with NFPA to standardize their competencies and build a program to reach those standards. TEPP is a mature program which is a lot more than just training. Upfront planning tools, the MERRTT and an exercise program are included in TEPP. Up front the initial activity is to have jurisdictions conduct a needs assessment to determine where they are in regards to a radiological response. The needs assessment tool is now on line and will automatically generate a report after a series of questions are answered. In many cases primary weaknesses are found in plans and procedures. TEPP developed model plans and procedures to fill this need. The training program covers awareness, operations and specialist modules. TEPP also offers hospital training from the FEMA course if a TEPP sponsored exercise is scheduled. The drill and exercise program is now updated to be Homeland Security Exercise and Evaluation Program (HSEEP) compliant.

About every 2 years revisions are made to the training program based on lessons learned and comments from responders. The latest release has updated video clips with improved quality and includes more hands-on exercises. A textbook practical exercise was added to the Public Information module and a picture card practical was incorporated to engage responders in determining the order of events in an incident response. The cards have pictures of event stages and responders lay then out on a table in order of how they would respond at an incident involving radiological materials.

Technician MERRTT (TMERRTT) is a new offering. With the new edition of NFPA 472 in 2008 a new annex D was added listing competencies assigned for radiological specific tasks. TEPP developed a crosswalk with objectives in MERRTT and found MERRTT did not meet all competencies so the decision was made to develop the Technician MERRTT program. TMERRTT is an 8-hour course that combines classroom coursework with hands-on scenarios consisting of three mini-drills. The mini-drills focus on decontamination capability, accident scene surveys, and mapping and locating lost sources. Prior to the drills responders develop an incident action plan using the National Incident Management System (NIMS) forms. TMERRTT has been piloted a few times and has worked out very well. The course uses live sources as opposed to the consumer

sources used in regular MERRTT. There are funding constraints and live sources increase costs so only a limited number of those courses can be offered. The course has been piloted in Lincoln, Nebraska and in Kansas City, Kansas. Prior to offering courses TEPP needs to verify that the responders have the right equipment and prior training so they are prepared for the course. The course incorporates a focus on responder's instruments and helps them understand how their instruments will respond in a radiation field including the instruments limitations and capabilities.

TEPP also has a Radiation Specialist course designed to help meet NFPA 472 Annex G. This is a detailed course – 40 hours including a lot of detail.

TEPP Exercises are conducted to validate plans and training. Exercises are HSEEP compliant so States and Tribes can take credit for doing a Homeland Security exercise. We have found that the exercises have really paid off when real radiological incidents occurred in 2009. In one incident the initial response was to evacuate the area but when the MERRTT trained hazmat team arrived they were confident and could take actions to check readings and understand that the package was not breached thereby stopping the nine county evacuation. In another incident at a fixed facility in Idaho workers trying to remove a source used a method which resulted in contamination. The Idaho Falls hazmat team was called in and they recognized that response actions could be undertaken with confidence.

In FY2010 exercises will include partnerships with jurisdictions in Topeka, Lincoln, Topsfield (Massachusetts) and Idaho Falls.

Where are we going? With TMERRTT and Radiation Specialist Course requests increasing budget is a concern. TEPP does not have high activity sources so we contract for them through an independent company. TEPP is currently looking into cost sharing options. There is a Radiation Specialist course scheduled for July in the Chicago area. TEPP's preference is to conduct those courses hosted in areas that can provide some of the high activity sources.

- **Audience Question – Melanie Rasmusson**: Did training in Nebraska, which received media attention and caused Iowa locals to call wondering why training was not happening in Iowa, get offered in Iowa? Lesson learned is to pay attention to what is going on in surrounding States as media will pose questions. Mr. Clawson advised that scheduled training is on the TEPP website (www.em.doe.gov/otem), but we can also give that information to the regional groups. This training schedule is also provided in the Outreach newsletter from the Office of Packaging and Transportation.

TRANSCOM: Current and Future

This session provided an overview of the current TRANSCOM projects and activities, highlights of recent program accomplishments, and a glimpse of the next decade of shipment tracking and monitoring.

Steven Casey, DOE TRANSCOM Contracting Officer Representative thanked all of those in attendance who worked to bring meeting together. TRANSCOM was developed out of a request

from stakeholders for a tracking program. Computer-based training has been developed and they are rolling out new features and improvements. TRANSCOM is a two-part program of interaction and communication. The Tracking system gives States and Tribes access to information on shipments going through their jurisdictions. The site has been redesigned to improve user friendliness. TRANSCOM has over 80 accounts with primarily group accounts. Some accounts are inactive and due to security rules must be purged. TRANSCOM has monitored over 16,500 shipments over the past 10 years with the majority being shipments to WIPP. The UF6 shipments are decreasing and WIPP shipments are anticipated to increase. They are engaged in partnerships with other DOE agencies.

The major upcoming change is a system upgrade. Upgrades are identified and done annually. Feedback asked that TRANSCOM show more information in the maps such as safe parking, All comments received on user needs are cached and during large system upgrades are incorporated as appropriate. They are currently looking at report creation tools so users can pull information from the database. Also group users must now fill out forms every time they add or delete a user and fax the form to the TRANSCOM center. TRANSCOM is trying to determine if it would be helpful for States and Tribes to have the capability to add/delete users no longer with their organizations. Additionally, many times schedulers and shippers have to rekey in information from their data and they are considering adding the ability to export that information directly from TRANSCOM to a manifest to reduce errors.

For future applications they would like to make TRANSCOM flexible without adherence to a fixed solution and be adaptable to meet emerging needs. They are also concerned with being competitive and maintaining effective services or products at reasonable costs. They want to make sure that TRANSCOM is sustainable even if software or service providers disappear.

Currently primary communication relays feed to a satellite which is very expensive. They are interested in developing a mobile version of TRANSCOM. They have been looking at Microsoft SQL as a move from ORACLE but no decisions for changes at this time.

Closing Plenary/Wrap-up

In closing the first NTSF meeting Steve O'Connor and Dr. Edward Wilds, Connecticut Department of Environmental Protection, walked the attendees through an electronic evaluation system to identify priorities for cooperation and action items and next steps to take for future meetings.