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April 28, 2009

Mr. Frank Moussa
U.S. Department of Energy
OCRWM Office of Logistics Management
1000 Independence Avenue, SW
Washington, D.C. 20585-0001

RE: Comments on the OCRWM National Transportation Plan, Revision 0

Dear Mr. Moussa:

Eureka County is an affected unit of local government under the Nuclear Waste Policy Act as amended. We appreciate the opportunity to provide the Department of Energy with comments on the National Transportation Plan.

General Comments

The "National Transportation Plan" (the Plan) is not a transportation plan that is equivalent to those that the Department of Energy has used for other shipping campaigns of radioactive material. Although it refers to DOE M 460.2-1A, *U.S. Department of Energy Radioactive Material Transportation Practices Manual*, the Plan does not include the elements described in "Section 2.6 Transportation Plans" of that manual. Specifically, the Plan does not include:

- Organizational Roles and Responsibilities
- Projected Shipping Window
- Estimated Number of Shipments
- Carriers to be Used
- Preferred and/or Alternate Routes
- Safe Parking Arrangements

It is more accurate to characterize the document as a description of the Office of Civilian Radioactive Waste's (OCRWM) transportation program as it currently stands.

In several places within the Plan, OCRWM refers to “transportation campaign plans” and “site specific campaign plans.” OCRWM states that these site specific plans will be completed at a later date. Yet, it is the contents of these future plans that are necessary to an **integrated** national transportation plan. If the key elements of the transportation system are developed piecemeal over time, for different shipping sites with different routes, the resulting transportation will not be systematic, but chaotic. OCRWM should not attempt to develop a “national transportation plan” until all the pieces that make up an integrated system have been developed.

The Waste Isolation Pilot Project *Transportation Plan* is an example of a systematic, integrated national transportation plan. In the purpose, it states, “This plan defines the requirements for managing transportation of TRU and TRU mixed waste from and between TRU waste generator sites and the WIPP.” In other words, that plan covers TRU shipments of all types from all generator sites. The transportation plan for spent nuclear fuel and high level radioactive waste should follow this example, that is, cover all waste from all shipment sites in an integrated plan.

Comments on Specific Sections

I. Introduction (p. 1)

DOE states that it intends to develop “a safe, secure and efficient transportation system.” The Western Governors, by resolution, have stressed that the transportation system should also result in “uneventful” shipments. DOE should include this as one of the objectives of the transportation system.

A. Background and Purpose (p. 1)

DOE states that the Plan describes the system when the repository is operating at full capacity. At this stage in the process, there are too many unknowns to accurately describe the system at full capacity. At best, the Plan describes some of the future needs of the system.

DOE also states that “detailed implementation plans” will be developed in the future. These detailed plans would undoubtedly contain the critical elements required by DOE’s Transportation Practices Manual. Those elements should be included in the Plan itself, not in some yet to be defined implementation plans.

B. History of Spent Fuel Transportation (p. 2)

In a footnote, DOE references the National Academy of Science’s report *Going the Distance*,” which concludes that there are no fundamental technical barriers to the safe transport of SNF and HLW. DOE fails, however, to address many of the Academy’s critical recommendations in the Plan.

C. Approach to Development of the Transportation System

1. Materials to be Transported

c. Naval Nuclear Propulsion Program SNF (p. 4)

DOE states that the NNPP is responsible for managing these shipments and for meeting all applicable requirements. The Plan provides no detail on how NNPP will manage the shipments, whether they will conform to the requirements of DOE's Plan, and what requirements are "applicable" to NNPP shipments.

2. Transport Modes (p. 4)

The plan states that most of the material will be transported by rail. It does not address how this will be accomplished given the disconnect between the timing for the construction of the rail line and the schedule for opening the repository; the problems with shipments from sites with no current rail access; and the issue of fuel currently packaged in containers that are not compatible with the TAD system.

3. Planning to Date (p. 5)

In describing examples of DOE's interaction with stakeholders, DOE states that it plans to use rail cars that meet the requirements of the Association of American Railroads (AAR) standards for shipping SNF. DOE does not provide any documentation to support this commitment.

4. Transportation Requirements (p. 6)

In this section, DOE states that a *Transportation Systems Operations Plan* and a *Transportation Program Management Plan* will be developed in the future. Again, the elements of these yet to be developed plans are critical components of a national transportation plan.

DOE also states that requirements and standards for the transportation plan are detailed in DOE's *Transportation Practices Manual*. As mentioned earlier, the Plan does not have the required elements of a transportation plan as listed on pages 7-8 of the Manual. In addition, although DOE states that it may use barges as a mode of transportation for sites without rail access, the Manual contains no requirements to date for barge systems.

II. Development of the Transportation System

A. Acquisition of Capital Assets

2. National Transportation Project

Other Casks for Commercial SNF Assemblies (p. 10)

In this section, DOE describes the approach for transporting fuel that has not been loaded into TAD canisters. The Plan fails to discuss how DOE will address fuel currently loaded into canisters that are not compatible with the TAD system.

DOE also states that some fuel will be transported in casks not using TAD canisters due to “fuel parameters.” The Plan does not describe what these parameters are, the volume of fuel that falls into this category, or the location of that fuel.

This section also discusses DOE SNF and HLW managed by the Office of Environmental Management (EM). The Plan states that OCRWM will be responsible for the design, certification and fabrication of casks for these shipments. It provides no information, however, on the specifications for these casks.

Cask Systems Acquisition Strategy (p. 12)

DOE states that 35 TAD canisters will be needed for initial operations and 100 transport casks will be needed for full operations. No justification is given for these numbers, or the number of the different types of casks (rail versus truck) that will make up the system.

Transportation Operations Center (p. 14)

DOE states that all transportation operations will be managed from a Transportation Operations Center. The Plan then states that “functional capabilities **could** be provided through the operations center. The examples listed that **could** be managed through the operations center are all critical functions to a safe and uneventful transportation system that should be assigned to a specific entity, rather than just listed as possible functions for the operations center. This is another example of how the Plan fails to include critical components describe as necessary to a plan in the Transportation Practices Manual. Specifically, the Manual states that one of the key elements in a plan is “Organizational Roles and Responsibilities” of the various entities involved in the shipping program.

B. Operations Development

1. Operations Development

Scope of Operations Development (p. 15)

The Plan lists the capability to operate the system as a major activity in the development of the transportation system. Training of responders is a critical requirement of the system that is not included in the elements listed to achieve this capability.

Current Status of Operations Development (p. 15)

The Plan states that stakeholders will be involved in the development of a “generic operations plan.” This generic plan will then be used to support development of detailed campaign plans. There is no commitment to include stakeholders in the development of these more detailed plans. The national plan should include the detailed plans for the entire system, not just a generic overview.

2. Campaign Planning (p. 16)

DOE “anticipates” that site campaign plans will be developed annually for each origin. This approach is flawed, since it fails to address the need to develop a systematic plan for the entire shipping program. Bifurcated plans can only result in a disjointed system and unaddressed cumulative problems resulting from shipments from different sites using the same or different routes during the same timeframe.

Notification (p. 17)

The Plan states State governments will receive advance notification of all OCRWM shipments to the repository. The Plan does not address notification by the NNPP for naval shipments. If NNPP will not be providing advance notification, the Plan should clearly state this, rather than veiling it by saying that “all OCRWM” shipments will be subject to advance notification, leading one to believe State governments will receive advance notification.

Inspections (p. 17)

The Plan states that loaded shipments will be inspected at origin sites for compliance with “appropriate requirements.” The Plan should specifically state which requirements DOE considers appropriate.

For rail shipments, the Plan states that inspections will be in accordance with the Federal Railroad Administration’s (FRA) *Compliance Oversight Plan for Rail Transportation of High-level Radioactive Waste and Spent Nuclear Fuel* (SCOP). FRA is on record that it does not have the resources to inspect the large repository shipping campaign. DOE should address how inspections outlined in the SCOP can be accomplished for its shipments.

Operation Contingencies (p. 18)

The operational contingencies listed in the Plan for weather and other natural phenomena do not comply with the requirements contained in the Transportation Practices Manual. Nor do they follow the established precedent for bad weather and road conditions used by other DOE shipping campaigns. For highway shipments, the Plan should describe how DOE intends to implement the requirements of the Transportation Practices Manual, and what additional steps they may take to enhance the safety of these shipments.

The Plan states that rail shipments will “proceed under railroad operating procedures.” Western States have consistently stated that these procedures would not be entirely appropriate for rail shipments, since a rail shipment could proceed under conditions where first responders would be unable to respond in the event of an incident.

Demonstration Projects and Reviews (p. 19)

Under Operational Readiness Reviews, the Plan states that “assessment of readiness reviews may involve origin sites.” Given their involvement in the shipments, origin sites should be involved. The Plan also states that based upon reviews, corrective actions will be taken to “address any gaps in plans or operational functions.” A key component missing is the readiness of first responders along routes to respond in the event of an incident.

C. Institutional Program

2. Current Status of Institutional Activities

DOE Emergency Plan (p. 23)

The Plan states that DOE will develop an emergency plan. There is no mention of coordination with or review by State and local responders. This coordination with State and local responders during the development of the plan is essential to the development of a workable system for emergency response. It is local government first responders who will be on scene in the event of an incident, and who have first responder responsibility.

Truck Routes (p. 24)

The section on truck routes is totally inadequate. The Plan simply states that DOE will follow current regulations in selecting routes. It does not address how DOE could reconcile inconsistencies between current federal routing requirements for single shipment from a point of origin to a destination, compared to the reality for this program of many shipments from many origins to a single destination. If carriers are required to route individual shipments according to current regulations, the result will be a plethora of actual routes used. The Plan should commit to requiring carriers to follow designated routes through contract provisions or other requirements.

Rail Routes (p.24)

The section on rail routing states that rail routing would “involve discussions between DOE and the chosen rail carriers.” The Plan should contain a description of options that DOE will use to require carriers to use selected routes. These options include the use of contract or tender provisions.

Preliminary Suite of National Routes (p. 25)

In this section, DOE notes that it will select a preliminary “Suite of National Routes.” DOE does not discuss how the final suite of routes will be implemented, or how they will address possible inconsistencies between the suite of routes concept and the federal regulatory requirement to select routes for individual shipments based upon “shortest distance” and “quickest time of travel” for each individual shipment.

In conclusion, the National Transportation Plan lacks the specific campaign plans that are the skeleton necessary for an **integrated** national transportation plan. If the key elements of the transportation system are developed piecemeal over time, for different shipping sites with different routes, the resulting transportation will not be systematic, but chaotic. OCRWM should not attempt to develop a “national transportation plan” until all the pieces that make up an integrated system have been developed.

Thank you for considering our comments.

Sincerely,

A handwritten signature in blue ink that reads "Abigail C. Johnson". The signature is fluid and cursive, with the first name being the most prominent.

Abigail C. Johnson
Nuclear Waste Advisor
Eureka County, Nevada

cc: AULGs
Nevada NWPO
NWTRB