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Western Interstate Energy Board/ WINB

May 12, 1997

Mr. Lake Barrett, Acting Director
Office of Civilian Radioactive Waste Management
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Mr. Barrett:

Enclosed are the comments of the Western Interstate Energy Board's High-Level Radioactive Waste Committee on the Department of Energy's draft request for proposals on the *Acquisition of Waste Acceptance and Transportation Services for the Office of Civilian Radioactive Waste Management*. The Committee finds that DOE's approach to privatization, as contained in the draft RFP, represents an unacceptable abdication of the federal government's responsibilities with regard to transporting spent nuclear fuel and high-level radioactive waste under the Nuclear Waste Policy Act. The Committee has therefore directed its comments towards providing DOE with an overview of those activities which western states believe cannot properly be delegated to private contractors.

The objective of an NWPA shipping campaign should be the safe and uneventful transportation of radioactive waste to a repository or interim storage facility. Such an objective cannot be met if DOE delegates to profit-driven private contractors the responsibility for carrying out any critical NWPA transportation planning activities. Several critical activities are directly addressed in the RFP, including: (1) interaction with states and tribes, (2) selection of transportation modes and routes, (3) preparation of an environmental impact statement addressing transportation concerns, (4) selection of transportation casks, and (5) working with states and tribes to develop plans covering transportation issues such as communications, training and security. There are several additional activities which many groups have identified as critical to a successful NWPA transportation program, such as the provision of adequate technical assistance and funding to states and tribes and the full-scale destructive testing of transportation casks, which are not directly addressed in the RFP. Decisions on how to undertake all of these activities cannot be delegated to a contractor. They must be made by DOE in consultation with states and tribes. The results of these decisions should then be included as mandatory stipulations of any contracts with private carriers. Any attempt by DOE to abdicate the responsibility for these decisions to a private contractor is certain to entangle the NPWA transportation program in endless challenges and growing public opposition to NWPA shipments.

Sincerely,

Richard C. Moore

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Co-Chair

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I. Introduction

Following are comments of the Western Interstate Energy Board's High-Level Radioactive Waste Committee (the Committee) concerning those activities which the Committee believes cannot properly be delegated by the Department of Energy (DOE) to a private contractor under a program for the transportation of spent nuclear fuel and high-level radioactive waste (SNF/HLW) under the Nuclear Waste Policy Act (NWPA).

The Committee recognizes that privatizing certain aspects of the NWPA transportation program may be appropriate. The use of private contractors is a routine occurrence in every aspect of DOE's operation. However, the federal government cannot abdicate its responsibility to ensure that nuclear waste transportation is conducted in the safest manner possible. By placing too much decision making authority in the hands of a private, profit-driven contractor, DOE will jeopardize the safe and efficient transportation of SNF/HLW. The result of such a program will be the use of transportation modes and routes chosen on the basis of economy that will be unsupported by any in-depth analysis or comparison of safety factors and which will destroy public confidence.

DOE still has not fully grasped the extent of scrutiny and potential opposition from the public which is likely to occur in response to large scale shipments of spent fuel and high-level radioactive waste across the United States. If the Department requires an example of the potential for such public opposition, it need only look to the recent public outcry in Germany regarding the transportation of high-level radioactive waste. Although the German shipping "campaign" involved only six casks which were to be transported 300 miles, the extent of the public's protest forced the German government to mobilize approximately 30,000 police officers to maintain the security of the shipments. In addition, more than 170 people were injured during the demonstrations, and the police were forced to make more than 500 arrests. The cost of transporting the six casks was estimated at around $100 million.[1] If such extreme public opposition is possible for only six shipments, then DOE should not ignore the concerns the public in the United States may have with as many as 93,000 NWPA shipments traversing over 62 million miles.[2]

As the Committee has repeatedly said, to prevent unnecessary delays DOE must take measures to assure the public that the NWPA shipping campaign is being conducted as safely as possible. Extensive reliance on the use of private contractors to make critical decisions affecting safety will not give the public the level of assurance necessary for the uneventful execution of

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[1] *Senate Congressional Record*, Testimony of Michael Mariotte, Submitted by Senator Richard Bryan, (April 9, 1997).

[2] *The Transportation of Spent Nuclear Fuel and High-Level Waste: A Systematic Basis for Planning and management at National, Regional, and Community Levels*, Prepared by Planning Information Corporation for the Nevada Nuclear Waste Project Office, (September 10, 1996), p. vii [*Hereinafter* PIC Report].

NWPA shipments.

Our concerns are supported by DOE's past record with regard to the use of private contractors. According to recent testimony before Congress from the General Accounting Office, "[h]istorically, these contractors have worked largely without any financial risk, had little fear of competition, and got paid even if they performed poorly; DOE oversaw them under a policy of least interference. We declared DOE's contract management a high-risk area because of its high vulnerability to waste, fraud, abuse, and mismanagement. The recent Secretaries of Energy have declared reform of contract management practices a major management priority."[3]

Nor do DOE's current plans to rely heavily on privatization inspire the confidence of either the public or other agencies within the federal government. In a February 1997 report on DOE's recent privatization approach for environmental cleanup work, the General Accounting Office states, "[u]nder privatization, oversight could become more complex and demanding...DOE does not have the procedures or the staff in place to carry out this role."[4]

Furthermore, DOE itself does not fully believe it can effectively oversee its contractors under the Department's current privatization initiative. According to the GAO report, "DOE acknowledges that even under its traditional contracting approach, it has had difficulty overseeing contractors. DOE officials emphasized that they are taking steps to assume this new role but recognize that DOE is not fully prepared. It remains to be seen whether DOE can effectively deal with this expanded role."[5] If DOE is not confident that it can effectively oversee its contractors, then it should only begin implementation of its expanded privatization initiative on those programs which entail low risk to the public health and safety. The transportation of thousands of tons of spent nuclear fuel is not such a program.

DOE's past and present record with private contractors, combined with the high degree of scrutiny which shipments of radioactive waste will inevitably receive, require that the Department take extra-regulatory steps aimed at winning public confidence and approval. Clearly, in the context of utilizing private contractors for transporting nuclear waste, the public will be unlikely to accept any DOE program which does not involve potential transportation corridor states and tribes at an early stage in the transportation planning process. In such a process, DOE must develop its own institutional plan, be responsible for selecting appropriate transportation routes and modes, and hold private contractors to these requirements through contract stipulations. Equally clear is the fact that corridor states and tribes will demand that DOE remain accountable for the safety of any such shipments and retain responsibility for interacting with states and tribes during each stage of the NWPA transportation program.

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[3] *Federal Contracting: Comments on S. 1724, the Freedom From Government Competition Act*, Testimony of the General Accounting Office, (September 19, 1996), p. 7.

[4] *Department of Energy Contract Management*, General Accounting Office, (February 1997), p. 27.

[5] *Id.*

II. Items and Activities Which are Unacceptable for Privatization

1) Interaction with States and Tribes

It is DOE's responsibility to communicate with and provide information to states and tribes regarding its nuclear waste shipping program. This responsibility cannot appropriately be placed in the hands of a private contractor. The public will justifiably perceive that a private contractor will only be acting in its own, profit-driven interests. It is DOE's responsibility to secure the public's confidence by demonstrating that it will provide strong guidance and supervision of its contractors and by taking clear responsibility for interacting with states and tribes regarding its nuclear waste transportation program.

The development of an institutional plan is also a federal responsibility which should not be delegated to a private contractor. Rather, DOE should, in consultation with affected states and tribes, design its own institutional plan, including elements such as information dissemination, participation in and/or conduct of meetings, public forums, training drills and exercises, emergency communications, and operational communications. Any private contractor which DOE chooses to utilize should then be contractually required to follow the provisions contained in DOE's institutional plan.

Simply providing that a contractor should coordinate activities with OCRWM and other contractors does not constitute an appropriate level of state, tribal and federal government oversight of a program which will need to withstand intense public scrutiny. The responsibility for coordinating between contractors, if multiple agents are used, should remain with OCRWM.

2) Modal Choice

The choice between the use of rail or truck for the transport of nuclear waste under the NWPA will have a major impact on the number of shipments which will traverse western states. Assuming, for instance, that contractors operate under the capabilities currently available, an estimated 79,300 legal weight truck casks would be shipped 62.3 million miles on 13,700 miles of the nation's public highways, and 12,600 rail casks would be shipped 14.0 million miles on 18,800 miles of the nation's railroads. Were contractors to rely heavily on rail, however, highway shipments could be significantly reduced to approximately 1,150 high-capacity casks shipped one million miles over 4,200 miles of highway.[6]

Modal selection also fundamentally affects the choice of routes which will be used and populations affected. For instance, in many cases the West's major urban areas grew around rail centers. If rail is selected as the mode of choice, it is likely that thousands of nuclear waste

[6] PIC Report, *supra* note 2, at viii.

shipments will pass through some of the region's most heavily populated areas, with limited alternatives for avoiding these areas.

A decision affecting both the total numbers of shipments under an NWPA program and the routes on which those shipments will travel cannot properly be decided by a private contractor, whose decisions will be heavily influenced by economic concerns. Selecting the safest mode of transport is a decision which should be made by DOE in consultation with affected states and tribes. The decision reached by DOE should then be implemented in the terms of any contracts issued.

3) Route Selection

In 1995, DOE issued discussion papers proposing methodologies for the selection of both highway and rail routes for DOE's unclassified highway route controlled quantity shipments, including shipments under the OCRWM program. At that time, the Committee was encouraged by the fact that, at least with regard to highway shipments of SNF/HLW, OCRWM had apparently decided that it would not leave routing decisions to the carrier, but would instead play a central role in selecting routes.[7] DOE should continue developing routing methodologies for rail, highway and barge shipments and should use these methodologies to select the routes to be used by any private carrier.

Especially for a nuclear waste shipping campaign of the magnitude contemplated under the NWPA, it is critical to promoting public acceptance for DOE to eliminate the carrier's role in selecting routes. A private contractor, motivated primarily by profit and cost-efficiency, will be most likely to choose routes based solely on minimizing miles traveled, time in transit, and rail tariffs. Other risk factors such as accident rates, potential property exposure, transit through environmentally and culturally sensitive areas, emergency response times, difficult to evacuate populations, dangers posed by bridges and tunnels, inclement weather, high-hazards, and time-of-day transit restrictions are not likely to be adequately addressed, if they are considered at all. States and tribes will not readily embrace an analysis conducted by a self-interested party, the results of which dictate the passage of thousands of shipments of radioactive waste through their jurisdictions.

In consultation with affected states and tribes, DOE must conduct a defensible route-specific analysis, taking into account all appropriate mitigation measures. Based on this analysis, DOE should select the primary routes to be used from each reactor site to the federal storage facility. DOE should then make the use of such routes mandatory in the terms of the contracts issued.

The Committee has previously advised DOE that a route-specific analysis cannot solely

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[7] *Comments of the Western Interstate Energy Board High-Level Radioactive Waste Committee on the DOE Discussion Papers on Highway and Rail Route Selection*, The Western Interstate Energy Board's High-Level Radioactive Waste Committee, (April 26, 1995).

rely on the Department of Transportation's highway routing rules, as provided under HM-164. Especially when shipments cover long distances, multiple combinations of Interstate highways would be allowable under the DOT regulations. Forcing states and tribes to prepare for nuclear waste shipments along multiple routes would be extremely costly and inefficient and could hinder the effectiveness of emergency response in the event of a transportation accident. Similarly, DOE should not rely on the historic commercial practices of railroads in determining the rail routes for NWPA shipments.[8]

There already exist substantial precedents for DOE to go beyond what is required in regulations to help assure that the safest routes are chosen for nuclear waste shipments. For example, in planning the Waste Isolation Pilot Plant (WIPP) transportation system, DOE worked together with affected states and tribes to develop a transportation safety program and to select the routes for shipping transuranic (TRU) waste. Through the establishment of clear contractual provisions, DOE agreed to ensure that private carriers use the designated routes. Western states and communities expect a level of DOE involvement in the selection of routes that is at least equivalent to that agreed to for the western TRU waste shipments, which are far less toxic than shipments of SNF/HLW.

4) Preparation of an Environmental Impact Statement Including Transportation Issues

An environmental data and analyses report prepared by a contractor cannot be considered a substitute for DOE conducting its own route and mode-specific analysis of transportation impacts as part of either the Yucca Mountain Environmental Impact Statement or a separate EIS for SNF/HLW transportation. As the Committee has previously pointed out, DOE has already committed itself to conducting such an analysis. In Volume III of the Yucca Mountain Environmental Assessment, which was conducted in 1986, DOE stated that, "[t]he DOE believes that the general methods and national average data used are adequate for this stage of the repository-siting process. Route-specific analyses and an evaluation of the impacts on host States and States along transportation corridors will be included in the environmental impact statement. The route-specific analyses to be performed in the future will proceed in the following sequence: (1) define important parameters; (2) gather data; (3) develop models as required; (4) perform analysis; (5) consider mitigating measures; (6) report results."[9] Western states continue to expect DOE to fulfill its promise of conducting its own in-depth route and mode-specific analysis.

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[8] There are no federal rail routing regulations. The route selection practices of railroads are primarily based on commercial needs and not necessarily on safety concerns. For example, in order to maximize revenues, it is standard industry practice for an originating railroad to maximize the distance a shipment will travel on its system before transferring the shipment to the next railroad. These standard railroad commercial practices are also embedded in DOE's rail routing models.

[9] *Environmental Assessment Yucca Mountain Site, Nevada Research and Development Area, Nevada*, Volume III, (May 1986), p. C.2-37.

5) Selection of a Transportation Cask

The decision to select a transportation cask or cask system to be used in transporting NWPA shipments should be directly determined by the routing and modal analyses conducted by DOE, as discussed above. Such a decision therefore cannot be left to a private contractor to decide. For instance, if after consultation with affected states and tribes, DOE decides to rely heavily on rail for the transportation of SNF/HLW, then resources would necessarily need to be directed towards the development and production of rail casks. DOE would thus need to require the use of such rail-compatible casks through a mandatory stipulation in any private carrier contract.

In addition, if private contractors are allowed to select multiple cask types for transporting SNF/HLW, the result will be an inefficient transportation system lacking in the use of standardized equipment or procedures. The benefits of such standardization have been touted by the Nuclear Waste Technical Review Board (NWTRB), which has recommended that DOE ensure the standardization of transportation casks, as would have occurred had the Department continued its Multi-Purpose Canister (MPC) development program.

In a recent report to Congress, the NWTRB stated that, with regard to DOE's "market driven" approach for the management and disposal of spent nuclear fuel, "[t]he Board hopes that many of the advantages of the MPC concept (e.g. standardization) can be retained as the market-driven initiative develops."[10] The Board concluded that DOE should establish specifications ensuring the standardization of casks used, stating that "[i]f the private sector is to provide the waste packages, the specifications should include uniformity of canisters and minimum need for transfers among canisters."[11] The Board also found that such standardization would have "great potential to improve the safety and efficiency of the overall system for management and disposal of spent fuel." The Committee agrees with the NWTRB assessment of this issue. Without such standardization, the NWPA transportation program will suffer the same problems and inefficiencies experienced by utilities in the construction and operation of nuclear power plants. In addition, the uncontrolled use of many different cask types will seriously complicate handling, storage, and disposal activities at a repository or interim storage facility.

6) Other Transportation Planning Activities

For any NWPA transportation campaign, States and tribes must be involved in the development of plans involving communications, training and security. Such planning activities cannot be placed solely in the hands of a private contractor. As an example of a program which has successfully involved states in each of these planning aspects, DOE should look to the WIPP program, where a Transportation Safety Program Implementation Guide was developed jointly by

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[10] *Report To The U.S. Congress and The Secretary of Energy, 1996 Findings and Recommendations*, U.S. Nuclear Waste Technical Review Board, (March 1997), p. 6.

[11] *Id.*, at 16.

DOE and affected states. Working cooperatively through the Western Governors' Association, the states, tribes and federal agencies involved defined their roles and expectations and incorporated them into a planning process which was then formally endorsed in a signed memorandum of agreement between the western states and DOE. Terms agreed to by the states, tribes, and DOE were then incorporated as mandatory stipulations in the private carrier contracts. This planning process has been successfully tested using DOE's cesium 137, radioactive nitric acid and foreign research reactor spent nuclear fuel campaigns, representing a total of approximately 60 shipments. The Committee can see no reason why a similar process of involving states and tribes in the transportation planning for NWPA shipments should not be utilized.

DOE should follow the WIPP program example of committing itself to working with affected states and tribes towards the development of: 1) a Transportation Plan; 2) a Communications Plan; 3) a Training Plan; and 4) a Security Plan. In addition to routing, the Transportation Plan should address such items as emergency response and the application of modern inspection, communication and tracking techniques. The Communications Plan should describe the various roles and activities for educating the public and public officials prior to the start of a transportation campaign, during a campaign, in response to an accident, and post campaign. The Training Plan should describe the level of training needed by state, tribal, and local emergency responders, public officials and the medical community in order to support the campaign as well as the roles of responsible agencies. The Security Plan should describe how security elements will be coordinated between the federal, state, tribal and local jurisdictions.

III. Conclusion

In an era of reduced budgets and diminishing resources, the Committee understands that there may be certain cost advantages in better utilizing the private sector for SNF/HLW transportation activities. However, privatization is not a panacea and can, if approached wrongly, cause many more problems than it solves. A privatization program should not be implemented at the expense of the safety of spent nuclear fuel and high-level radioactive waste shipments. The Department must: 1) retain full responsibility for interacting with states and tribes concerning the Department's program for transporting SNF/HLW; 2) involve states and tribes early in a process which will result in the selection by DOE of defensible transportation routes and modes; 3) conduct its own route and mode specific analysis of transportation impacts as part of the Yucca Mountain EIS or a separate SNF/HLW transportation EIS, and be responsible for selecting the routes and modes to be used; 4) establish specifications for the standardization of transportation casks used by private carriers to transport SNF/HLW; and 5) commit to implementing a transportation planning process with states and tribes which can address other transportation issues critical to stakeholders including, at a minimum, the development of plans which address transportation, communications, training and security concerns. Failure by the Department to retain responsibility for all of the above critical transportation activities will result in a dangerously flawed program which jeopardizes the safety of nuclear waste shipments and which is likely to generate significant public opposition. Such a program would cost the Department far more than any savings it could hope to generate by abdicating its responsibilities to private contractors.