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To: Public Interest Groups, Government Officials and Others

From: Marilyn Brill, Vice Chair, League of Women Voters Education Fund

Date: April 15, 1997

Subject: Fact Sheet: Transportation of Civilian Nuclear Wastes by Private Industry

One of the most important aspects of nuclear waste management facing the country today is the transport and disposal of that waste. According to the Nuclear Waste Policy Act amended in 1987, the Department of Energy (DOE) has the responsibility to move nuclear spent fuel from approximately 110 commercial nuclear reactors at 73 sites across the country to a federal facility, beginning not later than January 31, 1998. DOE has chosen to privatize waste transport and has issued a Request for Proposal for Transport Services on December 27, 1996.

Recently, the U.S. Senate passed a bill setting a date for construction of an interim storage facility and requiring that activities necessary to begin storing wastes at, and transporting them to such a facility would start no later than November 30, 1999. Once transport of high-level radioactive wastes and nuclear spent fuel begins, shipments could traverse as many as 43 states.

The League of Women Voters Education Fund prepared the enclosed fact sheet to help readers understand DOE's privatization plan and the issues and concerns expressed in response to it. While preparing the fact sheet we discussed the privatization concept with a cross-section of stakeholders in an attempt to define the various issues. We highlight three: stakeholder involvement, routing and safety, and regulatory safeguards. We hope the information will enable community leaders to provide meaningful input to DOE on this or related aspects of the proposed transportation program.

In addition to distributing the fact sheet to the 1,100 state and local Leagues, we are sending it to more than 1,500 groups and individuals on the Nuclear Waste Education Project mailing list. We invite you to further circulate it as you see appropriate.

If you have any questions or comments please do not hesitate to contact Sharon Lloyd-O'Connor, Program Manager, Nuclear Waste Education Project at **(202) 429-1965**.

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Transportation Of Civilian Nuclear Wastes By Private Industry

FACTSHEET

Use this factsheet to help formulate your response and comments on the U.S. Department of Energy's ***Draft Request for Proposal on Acquisition of Waste Acceptance and Transportation Services*** *of civilian spent nuclear fuel.* ***Comments are due May 15, 1997.***

See page 6 for highlights of DOE's proposed privatization program.

Introduction and Background

The Nuclear Waste Policy Act, as amended in 1987, states that, beginning not later than January 31, 1998, the Department of Energy (DOE) will dispose of high-level radioactive wastes and spent nuclear fuel. This will not happen by 1998 however—completion of all activities pertaining to the development of a permanent repository at Yucca Mountain in Nevada is not expected before the year 2010. To meet the obligations stated in the act, DOE is proposing a privatization program (acquisition of waste acceptance and transportation services) that could transport spent nuclear fuel beginning in 2002, if a federal receiving facility is available.

DOE has moved forward on its plans to make transportation of civilian radioactive wastes a private sector initiative. The move is aimed at meeting DOE's responsibility for managing spent nuclear fuel from the 110 licensed commercial nuclear power plants in the United States in an efficient way.

The DOE Office of Civilian Radioactive Waste Management (OCRWM), established to manage and dispose of the nation's spent nuclear fuel and high-level wastes, has been overseeing and conducting site characterization activities at a site in Nevada for permanent disposal of waste (called a repository). So far, utilities have stored the wastes on-site—but DOE is pursuing a more permanent solution for the accumulating wastes.

Utilities have been urging Congress to consider construction of an interim storage facility near Yucca Mountain that could be ready to accept the wastes before 2010. But the process for selecting a site is complex, for both scientific and political reasons. Current law constrains the schedule for siting and operating an interim storage facility and prohibits placing an interim facility in Nevada, so Congress would have to amend the law if such a facility is to be built in Nevada.

In pursuing its privatization plan for the entire waste acceptance and transport services operation—from collection at utility sites to disposal at a federal facility—DOE issued a draft Request for Proposal (RFP) on December 27, 1996, in *The Federal Register*.

This draft RFP describes the work to be done and the "concept of operations," with up to four contractors—or Regional Servicing Agents as they are to be known—servicing different parts of the country. **DOE's public response/comment period for this draft ends May 15, 1997.** DOE held its second Pre-Solicitation Conference for prospective bidders and interested parties on February 25, 1997 (the first was held June 9, 1996).

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DOE will use comments received to improve the solicitation and may address areas such as contractor selection criteria; state, local and tribal government and nongovernmental involvement mechanisms; and the way in which contractor responsibilities will be integrated with federal government responsibilities.

Contracting government services to the private sector is not new. But since spent fuel transport involves potentially moving 86,000 metric tons of spent nuclear fuel across 43 states and the lands of 30 Native American tribes, citizens have raised questions with regard to public safety, policy direction, cost-benefit analysis, public involvement, routing and regulatory requirements.

The League of Women Voters Education Fund (LWVEF) prepared this factsheet as a resource for state, local and tribal organizations, communities and resource personnel in the public and private sectors who may be involved in or affected by decisions made on spent nuclear fuel issues.

The factsheet highlights key issues on the draft RFP raised by various stakeholders, such as emergency response planners, state and tribal governments, railroad associations, environmental organizations, fire and police departments and utility companies. DOE is seeking insights from readers on questions such as these.

Key Issues

It is widely recognized by citizens that the privatization initiative could be a constructive innovation—*if* key factors can be resolved. Many emphasize that issues related to routing, mode selection, public involvement and regulation will not be resolved unless DOE articulates a clear-cut policy and rationale that support privatization.

A key selling point for privatization has been the prospect of saving taxpayer dollars. Understandably, citizens have expressed an interest in understanding how the privatization plan will save money. Some have suggested that DOE perform a cost-benefit analysis to answer the question.

Leaders in transportation, emergency management and citizen organizations stress the importance of having a transportation policy that integrates several key factors. It should include shipping modes (rail and highway), route planning to minimize public exposure by reducing the numbers of shipments and routes used, a cost-benefit analysis, environmental considerations and public involvement.

The need for a clear-cut policy and cost-benefit analysis centers around three major issues: public involvement, routing and regulatory safeguards.

Public Involvement

DOE will consider the insights it receives from public comments on the draft RFP when formulating the final RFP. Some citizens have expressed fundamental concerns regarding public involvement in this privatization program, pertaining, for example, to route and mode selection, training, emergency response and inspection of shipments.

Fundamental concerns are:

- ***How will a privatized system involve citizens?*** As presented in the draft RFP, contractors have the responsibility to select routes, plan waste shipments and interact with state, local and tribal governments. State, local and tribal governments are concerned that they will be seeking redress for their grievances from a private company rather than from the federal government.

  They also are asking for a clear cut process/design that will define how contractors will work with them on prenotification of routing, emergency response and inspection. At the least, citizens are asking that the privatization plan include an appeal process, where contractor nonperformance could be addressed. Finally, citizens would like the ability to get information from contractors.

During this privatization program, DOE will follow regulations applicable to structures, systems, components and services, that have been established by the Nuclear Regulatory Commission (NRC) and the Department of Transportation (DOT). But states and transportation experts want the DOE to go beyond regulations to ensure that contractors work with states on all critical issues, including routing.

Routing

Public interest groups consider routing a controversial and critical issue in DOE's privatization effort.

Assuming that Yucca Mountain is selected to be the site of the repository and becomes operative to accept wastes, extensive transportation planning will be necessary for rail and truck shipments leaving the 73 sites now storing wastes, which are mainly east of the Mississippi River. Also, the waste quantity to be moved (an estimated 300 to 500 shipments of spent fuel each year for 30 years) will require integrated planning. This planning will have to address transportation routes and modes, technology (new generation of rail and truck, canisters and casks), cost-benefit analysis, emergency response, community training and preparedness.

Many groups and transportation experts believe that the privatization effort is getting too far ahead of emergency preparedness and training of responders along transportation corridors. These citizens, who have given input to DOE/DOT over the years to develop working plans on routing, emergency response, community preparedness and training, question how contractors will address their concerns when choosing routes. Major concerns raised are highlighted below:

- ***Should route selection and scheduling be a federal responsibility or be left to the contractors to decide?*** Contractors are expected to determine transportation routes in accordance with federal requirements of the DOT, and with the approval of NRC. Many citizens believe that the federal government has the experience in managing route selection and has gained some good faith of the public. But, since contractors are given the responsibility of route selection, state and local governments and public interest groups want to see the RFP specify criteria, such as population densities, for route selection. They also want the RFP to require contractors to demonstrate how they would select the safest routes, limit the number of routes used, and consult with states and tribal governments in choosing routes.

- ***Would the goal of saving money result in short cuts with regard to route selection?*** In this contracting system, DOE aims to maintain a healthy competition through its fixed-price system. Contractors would be required to make a major, long-term investment before they see financial returns—some say over nine to ten years. Although the draft RFP includes a provision for economic price adjustments and the requirement for federal regulations to be met, citizens have expressed concern over the risk of contractors taking short-cuts in selecting transportation routes and in the types of casks chosen.

- ***Will public hearings be held on the routing plan(s)?*** DOT regulations require the carriers to use preferred routes designated by the states and interstates if an alternative is not designated. States and tribal groups are concerned that they will not be involved in route selection decisions. Community group leaders would like the routes to be selected far in advance (at least three years before actual transport) and approved by the states involved. Advance planning would help local groups involved in education, training, emergency response and medical preparedness to be ready for the shipments.

Regulatory Issues and Safeguards

Shipments of commercial radioactive waste must comply with federal regulations and standards set by the NRC and DOT. Furthermore, NRC-established Quality Assurance requirements must be met in those facets of radioactive waste management and transport

that come under the Quality Assurance Requirements and Description of OCRWM. DOE notes that servicing agents and their subcontractors must adhere to these rewgulations and follow all NRC-issued standards and codes when transporting the wastes.

Public perspectives, including public involvement on the required regulations and safety standards, vary, however, as highlighted below:

- ***With higher quantities of nuclear wastes being shipped across the country, should enhanced safety protocols be applied?*** The draft RFP does address continuous monitoring among other performance standards that the carriers must meet during transport of the wastes. Also, the Code of Federal Regulations applicable to the contractor is specified in the draft RFP. But emergency responders, training specialists, and local and tribal governments have expressed concern about whether relying on contractors to follow regulations is sufficient to ensure safe transport. They suggest that, given the nature and quantity of wastes to be shipped and the public's concern about radioactive material shipments, the requirement to follow enhanced safety protocols should be specified in the RFP and adopted by all shippers. These enhanced protocols include the use of satellite tracking systems, protocols for bad weather travel, parking regulations, coordinated state inspections and emergency preparedness procedures.

- ***Should the issue of multi-purpose canisters be revisited?*** The Multi-Purpose Canister (MPC) program started by DOE was phased out to save costs. With higher quantities of shipments expected to be transported in the future, many public-interest groups are concerned about potential exposure to radiation during handling of the fuel. Critics say that, because there is still scientific uncertainty regarding the effects of radiation emitted during the transport of spent nuclear fuel, it is important to reduce handling of the wastes through promising technologies such as the multiple-purpose canisters. DOE notes that the RFP does not discourage use of MPCs.

- ***Should contractors be responsible for ensuring enhanced vehicle safety during transport?*** The Commercial Vehicle Safety Alliance (CVSA) has worked with DOE for several years to develop vehicle inspection standards, which have been successfully tested on select hazardous material shipments. To ensure higher safety for the transport of spent nuclear fuel, corridor communities and state and local officials would like to see the CVSA standards included in the RFP.

- ***Should railroad technological and safety requirements be integrated into the draft RFP?*** To transport spent nuclear fuel at low costs, servicing agents will most likely look toward rail as the preferred mode. The American Association of Railroads and transportation experts recommend that the RFP specify the use of dedicated trains, best available technology, and the evaluation and testing of trains as whole systems, not as individual components.

- ***Is an environmental impact assessment necessary?*** The National Environmental Policy Act of 1969 requires federal projects to undergo the Environmental Assessment (EA) process. The draft RFP requires contractors to prepare a quantitative report describing foreseeable direct and indirect environmental impacts resulting from the implementation of the activities to be conducted. In addition, DOE plans to apply this privatization plan to the transportation component of the Yucca Mountain Environmental Impact Statement (EIS). Similar to the concern expressed by emergency response and training operations, however, several environmental groups believe that the privatization plan is outpacing the EIS process. Some stakeholders say that this privatization initiative calls for an EA *before* the contract is awarded.

- ***Should the RFP specify contractor responsibilities regarding training on emergency preparedness?*** Section 180(c) of the Nuclear Waste Policy Act (NWPA) of 1987 provides for technical assistance and funding to states for training with respect to

safe routine transportation of nuclear waste and emergency response (e.g., emergency responders, inspections, etc.). The training can be administered through local and tribal organizations. DOE will implement the requirements of Section 180(c), not the servicing agents. Tribal and state organizations would like to see DOE's commitment to Section 180(c) reflected in the RFP.

- ***Will the program provide for checks on noncompliance?*** Although noncompliance with published regulatory standards carries penalties, some citizens expressed the need for the RFP to specify the types of checks that will be applied to contractors who fail to comply with those standards.

Other Issues

Other important issues that have been raised by citizen groups are:

- ***Should DOE impose a standard set of operating criteria on the multiple contractors?*** According to the draft RFP, nuclear waste from various parts of the country will be moved by up to four different contractors to a single location, anticipated to be in the west. Each contractor will have its own routing plan, and each will have to coordinate with community and emergency management teams. DOE considers the standardized operational requirements and regulations for all contractors, as specified in the RFP, to provide sufficient consistency and guidance.

Groups and individuals interested in offering comments, questions or suggestions to DOE on the draft RFP for Waste Acceptance and Transportation Services can direct them to:

Michelle Miskinis
Contracting Officer
U.S. Department of Energy
1000 Independence Avenue, SW
Attn. DE-RP01-7RW00320
Washington, DC 20585

For more information on the draft RFP refer to document (December 27, 1996) available in *The Federal Register*.

Full text also is available on the OCRWM website: http://www.rw.doe.gov/

Highlights of the Draft RFP
Acquisition of Waste Acceptance & Transportation Services

DOE document # DE-RP01-97RW00320 (December 27,1996)
or website http://www.rw.doe.gov/

Within an overall national agenda to reduce federal expenditures and increase privatization, DOE has launched this initiative to derive the benefits of a market-driven, fixed-price approach, with competition for bidders. The program invites contractors to bid for a "package deal," which will include waste acceptance and transportation services of civilian spent nuclear fuel.

The Draft RFP describes the three-phase approach planned, the statement of work and the concept of operations. Highlights of the draft RFP are:

- **Fixed-price, market driven and privately financed contracts:** Fixed-price means that the contract will be awarded based on unit price for the services, i.e., based on performance, as opposed to those based on level of effort and cost-plus fees. This is unlike other DOE contracts where DOE pays all costs and assumes essentially all the risk. Market-driven means competitive. Privately financed means that the contractor will get financing outside of the DOE. The department will reimburse the contracts on the dollars per MTU of wastes transported.

- **Servicing regions and agents:** The country is divided into four servicing regions, which are the same as the regions specified by the Nuclear Regulatory Commission. Up to four servicing agents will be chosen. A contractor would be authorized to provide services to no more than two regions.

- **Three phase contract:** The contract has been divided into three phases:

I. Develop service plans—expected to span 12 months;
II. Acquire and mobilize hardware—eight year contract;
III. Accept and transport the wastes—commencing about three years after the start of Phase II, lasting five years.

- **Contractor functions:** The agents will be responsible for a range of services, including route planning, hardware acquisition, incidental maintenance, inter-modal transfer, physical protection/escort services, interaction with state and tribal governments, and prenotification of shipments. They will be responsible for notifying NRC, OCRWM, the utility, and state and tribal governments in the event of an emergency. State and local agencies will be responsible for emergency response.

- **Regulations:** Agents must meet applicable federal regulations (NRC and Department of Transportation) and shipping containers must be NRC certified. Contractors and subcontractors must meet quality assurance program and plans.