

**PREVIOUS DOE TRANSPORTATION ACQUISITION EFFORTS FOR SPENT FUEL
SHIPMENTS: AN ANALYSIS OF COMMENTS RECEIVED ON CONTRACT STRUCTURE**

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ABSTRACT

The U.S. Department of Energy (DOE) is planning for future large-scale transport of commercial spent nuclear fuel (SNF) and high-level radioactive waste (HLW) to eventual disposal and/or storage facilities. Various options for procuring transportation services are being evaluated by DOE. To inform this work, a review of past comments received on DOE transportation acquisition requests for comment from the 1990s and early 2000s was conducted. Through the course of data collection, staff analyzed submitted comments from nine initiatives from DOE's Office of Civilian Radioactive Waste Management (OCRWM) and DOE's Office of Nuclear Energy (DOE-NE), including OCRWM Requests for Proposals (RFPs), Requests for Information (RFIs), Notices of Program Interest (NOPI), and Statements of Work (SOW). Additionally, comments received from vendor surveys, Congressional Reports, and comments on a DOE-NE RFI for Consolidated Interim Storage Facilities (ISF) were also examined. Past issues identified by a wide variety of commenters were examined, including nuclear industry, cask vendors, nuclear utilities, purchasers, States, Tribes, local governments, rail carriers, non-governmental organizations, trade organizations, engineering firms, and members of the public. This paper summarizes key themes arising from these comments, focusing primarily on comments regarding potential contracting strategies. Analysis focuses on the following areas: Industry Risks, Contracting Uncertainties, Limitations of Fixed-Price Contracts, and Contracting and Procurement Strategy. By analyzing these comments, insight can be gained on previous acquisition efforts, allowing DOE to better understand and anticipate key issues relevant to the nuclear industry and other stakeholders, draw from lessons learned, and identify likely areas of contracting-related transportation concerns moving forward.

INTRODUCTION

The U.S. Department of Energy (DOE) is planning for future large-scale transportation of commercial spent nuclear fuel (SNF) and high-level radioactive waste (HLW) to an eventual disposal and/or storage facility. A review of previous planning efforts for transportation acquisition requests for comment for transport of SNF and HLW was conducted over the course of a year, and past issues identified by a wide variety of commenters were examined. These issues concerned DOE's activities to make maximum use of the private sector to transport SNF and HLW.

Throughout the 1990s and early 2000s, DOE focused efforts on preparing to acquire transportation services. DOE sought to develop an approach for waste acceptance, storage, and transportation responsibilities outlined in the Nuclear Waste Policy Act of 1982, as amended (NWPA) [1], and the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste (Standard Contract). [2] DOE's then Office of Civilian Radioactive Waste Management (OCRWM) proposed to follow a market-driven acquisition process relying on private industry (contractors) to provide necessary services and equipment at competitive, fixed prices and fixed rates. DOE's efforts included drafting a series of Requests for Proposals (RFPs), Requests for Information (RFIs), Notices of Program Interest (NOPI), and Statements of Work (SOW) soliciting public comments concerning its proposed approach for carrying out waste acceptance and transportation services.

This paper summarizes key themes identified in a review of comments received by DOE on a variety of past transportation acquisition requests for comment. After a brief review of methodology, the paper moves to a

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discussion of key themes relevant to contracting structure that arose from the public comments, focusing on the following topics:

1. Industry Risks
2. Contracting Uncertainties
3. Limitations of Fixed-Price Contractsⁱ
4. Contracting and Procurement Strategy

This is a technical paper that does not take into account contractual limitations or obligations under the Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste (Standard Contract) (10 CFR Part 961). For example, under the provisions of the Standard Contract, spent nuclear fuel in multi-assembly canisters is not an acceptable waste form, absent a mutually agreed to contract amendment.

To the extent discussions or recommendations in this paper conflict with the provisions of the Standard Contract, the Standard Contract governs the obligations of the parties, and this paper in no manner supersedes, overrides, or amends the Standard Contract.

This paper reflects technical work which could support future decision making by DOE. No inferences should be drawn from this paper regarding future actions by DOE, which are limited both by the terms of the Standard Contract and a lack of Congressional appropriations for the Department to fulfill its obligations under the Nuclear Waste Policy Act including licensing and construction of a spent nuclear fuel repository.

METHODOLOGY

From 2017 through 2018, DOE and contractor support staff began a process of data analysis, reviewing and summarizing comments received on nine requests for comment (specific requests for comment that were analyzed are listed under references 3-11). The goal of the data analysis was to identify comments received on past storage and transportation acquisition requests for comment, summarize all comments, and identify likely areas of concern moving forward.

In the transportation acquisition requests for comment analyzed, DOE proposed that contractors would accept SNF from its owners and generators (“Purchasers” under the Standard Contract) and supply casks and equipment for transportation of SNF to a designated Federal facility. According to these RFPs, contractors would work with Purchasers to determine the best way to service a site and would recommend to the U.S. Nuclear Regulatory Commission (NRC) preferred transportation routes. These proposals relied on Regional Servicing Agents (RSAs) or Regional Servicing Contractors (RSCs). RSAs or RSCs would have performed duties as full-service DOE contractors serving as DOE’s agents in accepting SNF and transporting it to a federal facility.ⁱⁱ

In total, 365 discrete pieces of correspondence were analyzed (excluding form letters).ⁱⁱⁱ For each of the requests for comment analyzed, each public comment received was divided and categorized into individual, discrete comments based on key categories developed.^{iv} Categories were developed and adjusted based on the comments received. Categorized comments were then reviewed and refined into sub-categories within each respective category. For each solicitation, all comments from a category were summarized, and key themes were identified. Comments were received from a variety of stakeholders, including nuclear industry and cask vendors, nuclear utilities and purchasers, Tribal governments and organizations, state regional groups (SRGs) and state and local governments, Non-Governmental Organizations (NGOs), trade organizations, labor unions, rail carriers, law firms, engineering and manufacturing companies, DOE National Laboratories, consulting firms, members of the public, and the DOE-Idaho Operations Office.

Although the methodology sought to be as thorough as possible, it was challenging to locate all public comments received for each initiative due to a variety of factors, including lack of a database for public comments, no

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systematic record of accounting, and loss of institutional records knowledge due to staff turnover. While most comment letters were located, comment letters from two initiatives were not.^v It must also be noted that the comments discussed below are a selective sampling of themes and were prioritized for themes relevant to this conference.^{vi}

INDUSTRY RISKS

Industry and utility commenters observed that the proposals put forth by DOE required tremendous risk on the part of industry. Most industry and utility reviewers submitted comments questioning what DOE's risks were and noted that the risk-sharing aspect of proposed procurements were solely in favor of DOE. Utility and industry commenters cautioned that DOE must understand that financial risks transferred to contractors would be reflected in higher costs to DOE and reduced interest or unwillingness of bidders to respond to an RFP. As the number of qualified bidders decreased, a potential reduction in competition would ensue, curtailing any cost savings.

Numerous utility and industry commenters expressed concern over the allocation of financial, regulatory, performance, and operational risks between DOE and its contractors. Under the proposals examined, almost all risk was shifted onto bidders.

“It is unrealistic of the Department to expect these prospective RSAs to accept the full risk of future regulatory changes, yet there is no language in this draft RFP that would seem to adequately address the ‘equitable’ sharing of such regulatory risks” (Nuclear Regulatory Commission Region II Utilities comments on December 1996 RFP). [4]

Given the structure of the various approaches proposed in the requests for comment, nearly all commenters, spanning the spectrum from industry to State, Tribal and local governments to utilities and NGOs, noted that such proposals required arduous, up-front cash flow requirements of bidders. They cautioned that only a few, larger companies would be able to potentially bid on any DOE proposals. In turn, this would likely result in reduced competition and a potential price increase.^{vii}

“We are concerned with the fact that, while the Department's stated objective is to allocate the financial, regulatory, performance, and operational risks between DOE and its contractors, this procurement as currently structured would appear to shift most of those risks onto prospective bidders and onto the disposal contract holders. The Department should recognize that prospective bidders are not going to accept such risks without factoring the associated costs of these risks into their bids. In transferring the majority of the risks to the bidders in this manner, the Department is not assuring itself of the best costs for these services – it is merely ensuring that it will receive bids from only those who have nothing to lose” (Nuclear Regulatory Region II Utilities comments on December 1996 RFP). [4]

Industry commenters also expressed concern that onerous payment terms (i.e., no payments received until after services rendered) would preclude all but large-scale firms from applying. Commenters underscored that it was impractical to expect bidders to commit the financing required in early phases of the contract when their only means of recovering costs would be through services rendered in later phases. Numerous industry commenters cautioned that few potential vendors would be willing or able to put money on the line without a return on investment for numerous years (or potentially, no return on investment). As DOE-Idaho Operations Office explained:

“Generally, we believe this concept of privatizing the transportation may have considerable difficulty realizing its goals because few if any vendors would be willing to put their money on the line without any return for so many years, as envisioned in this RFP. DOE ID [Idaho] has had some recent experience with

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privatization and this has been one of the main problem areas” (DOE Idaho Operations Office comments on December 1996 RFP). [4]

CONTRACTING UNCERTAINTIES

In addition to risk-sharing concerns, most industry commenters noted that there were a multitude of uncertainties in the current structure of the proposed approaches included in the requests for comment. Key areas of uncertainty expressed by commenters included funding, contract length and timing of activities, schedule delays, and equipment ownership.

Funding

Industry commenters expressed concern with continuity of funding during the life of the project. Commenters elaborated on these funding concerns, noting that given the structure of the proposed RFPs and SOWs, payment for services rendered appeared to be dependent on congressional appropriations. Given this structure, commenters believed that DOE would need to commit to pursuing congressional appropriations early in the process, or for the entire contract length, in order for industry and vendors to have confidence in DOE’s ability to honor financial commitments. In order to offer any certainty to stakeholders, multiple commenters noted that there should be a concrete funding mechanism in place through Congress and DOE.

Industry proposed that DOE explore the use of advance appropriations to have sufficient budget authority for the entire life of a contract. Without that, DOE’s promises for payments for services rendered would remain uncertain.

“DOE should explore the use of advance appropriations to have sufficient budget authority for the entire life of a contract for SNF acceptance, transportation, and storage services. Because DOE must have the budget authority in current appropriations for the entire length of a contract, congressional appropriation process uncertainties may limit the length of the contracts and discourage potential bidders from proffering cost-effective proposals” (Nuclear Energy Institute comments on December 1996 RFP). [4]

Various commenters offered additional suggestions on how DOE could offset some of these risks, such as by DOE underwriting a portion of development costs or by designing a contract that addressed these concerns (discussed further in the “Contracting and Procurement Strategy” section below).

Timing of Activities and Contract Length

Nearly all commenters observed a lack of clarity regarding the timing of when activities would be conducted and encouraged additional planning be undertaken to address this in any future effort. Industry commenters maintained that the timing allowed for pick-up schedules was not realistic (instead emphasizing a ramping up of activities), the timing to procure hardware (for storage and transportation) was inadequate, and that modifications to the schedule should be included:

“We are concerned that DOE may not have provided adequate time in its proposed schedule to develop waste acceptance and transport capability” (Dominion Generation comments on January 2001 Report to the Committees on Appropriations). [9]

Numerous industry commenters also proposed that DOE should establish time limits on specific activities in order to ensure efficiency of operations (e.g., time allowed after shipping vehicle arrival to unload full casks). In order to gain a better sense of the timing of activities, numerous commenters offered that any proposed RFP, SOW, or other DOE initiative could include a selection timeline and timeline of key milestones.

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Contract term length also proved to be a source of concern for industry and utility commenters, particularly in relation to the risk that bidders could potentially bear. Industry commenters highlighted that an offeror would not be able to provide confidence to agencies or enter into agreements if facility services were to be re-bid every five years. Still others cautioned that contract length may also impact relationships with key stakeholders:

“DOE should also consider the effect of contract term on the continuity of relationships with local, state, and tribal governments regarding transportation of spent fuel through their jurisdictions” (Nuclear Energy Institute comments on December 1996 RFP). [4]

Utility commenters noted that a five-year contract would limit competition and increase costs, given that the contractor would have to make substantial investment in equipment that would have limited value in later contract phases (if DOE were to switch to another contractor in subsequent phases). Some industry and utility commenters recommended extending the contract term to 8-12 years, while others recommended that contracts allow for negotiations or extensions, with re-bids based on non-performance or substantial negative feedback.

Schedule Delays

Numerous commenters underscored the risk that delays posed and explained that this could potentially impact future phases of the contract. Still others questioned which party would be responsible for payments if delays were to occur if, through no fault of their own, contractors experienced delays resulting from actions taken by a State, Tribe, or local government or resulting from the inability of a facility to open.

Commenters proposed a potential means of controlling risks passed to the contractor through compensation for delays. Other commenters proposed the idea of “safety-net compensation” to accommodate delays, particularly during early operations when obstacles to progress might be expected:

“The RFP should allow for ‘safety’ net compensation’ to accommodate delays that can be expected... Absent such a safety net, it will be difficult for RSAs to acquire capital financing for equipment, facilities, personnel, design, development, and licensing activities, etc. In addition, provisions must be included in RSA contracts that allow for extraordinary costs of operations that arise from actions of local jurisdictions that are beyond the control of the RSA” (Science Applications International Corporation comments on December 1996 RFP). [4]

Furthermore, any periodic changes to either NRC, State, Tribal, or local regulations could also introduce risk that would need to be factored into any potential contract, according to industry commenters. They offered that specific contract language should address potential impacts to a contractor’s cost and schedule estimates due to unforeseen perturbations in plans caused by these activities.

Equipment

Industry respondents pointed out that equipment availability (such as casks) would be key throughout the contract term. Of concern was whether equipment would be leased or owned. Respondents noted that equipment leasing versus ownership created uncertainty for bidders, impacting a potential procurement, costs, and contract length:

“Since a significant investment in hardware is required, the lease option will greatly limit competition in the future since those who own equipment will have significant cost advantage. Government ownership of equipment would preserve greater services competition in the future” (Vectra comments on May 1996 RFP). [3]

However, some industry commenters felt that ultimate ownership of equipment should be a point of mutual agreement between DOE, the contractor, and negotiated in the final contract. Commenters additionally requested clarity on whether a contractor would be reimbursed for equipment if they lost the contract bid in later phases (the

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approaches in the requests for comment analyzed were structured so that potential bidders had to reapply for subsequent contract phases and therefore could potentially bid and win during the first phase and lose during a subsequent phase). Commenters questioned who would own equipment and whether DOE would take possession and title to equipment at the end of a contract term:

“...What will become of the hardware and transportation systems put in place during the first five years if the vendor is not reselected? DOE needs to consider having a longer period for contract performance (i.e., 10 years or more) and consider owning the equipment provided since it most likely would have been paid for by DOE” (Westinghouse comments on December 1996 RFP). [4]

Numerous utility and industry commenters also requested that DOE clarify whether reimbursement for avoided expenses would be made available. Finally, these commenters also noted that by increasing contract length to longer than five-years, some of these concerns could be lessened, since longer time periods provided greater certainty that capital equipment costs could be amortized.

LIMITATIONS OF FIXED-PRICE CONTRACTS

Across the various DOE requests for comment analyzed, fixed-price contracts were explored as a potential contracting vehicle. Some industry commenters noted that a fixed-price contract could work for the activities proposed, potentially creating competition and ensuring contractor accountability. However, the majority of respondents noted numerous issues with fixed-price contracts, and almost all commenters maintained that fixed-price contracts were only successful when uncertainties were low. Therefore, most industry commenters believed a fixed-price contract structure was not ideal for the transportation acquisition activities proposed by DOE, given the numerous uncertainties involved and the significant financial investment required on the part of potential bidders.

“Given the nature of this program, uncertainties will necessarily exist in routing, schedules, and sites. In view of the uncertainties, this program should not be conducted under a fixed price structure. Use of a fixed price structure will likely discourage participation by potential respondents or require potential bidders to inflate their cost estimates to cover uncertainties” (Science Applications International Corporation comments on December 1997 RFP). [5]

Industry commenters found that the nature of the re-bid process, where contracts were to be re-bid every five years, added another element of uncertainty that made fixed-price contracts less desirable. Furthermore, industry and State, Tribal, and local government commenters underscored additional limitations with a fixed-price contract structure, highlighting that unclear roles and responsibilities of DOE, utilities, contractors, and various stakeholders made implementing a fixed-price contract even more difficult.

“The open-ended responsibilities that go along with an institutional program that will be contentious cannot reasonably be accommodated within a fixed price arrangement...We suggest that the institutional responsibilities of the RSA be handled under a different contracting arrangement...As history has shown with this program and other DOE transportation programs (e.g., the foreign research reactor spent fuel program), there are so many unanticipated activities that will arise in the institutional arena” (SAIC comments on December 1996 RFP). [4]

Among State, Tribal, and local government commenters, concerns were also expressed regarding fixed-price contracts. Multiple local and State government commenters worried that under a fixed-price contract, bidding contractors would be expected to keep prices low, and therefore would likely not include certain activities (such as stakeholder engagement) that should be included in the contract. As such, commenters emphasized that fixed price contracts were inappropriate for this type of work unless guidelines were set by DOE.

Alternatives to Fixed-Price Contracts

Numerous commenters proposed alternatives to fixed-price contracts that they maintained were better suited for the activities to be undertaken by DOE. Respondents suggested cost-plus contracting, cost reimbursable, pay-as-you-go services tied to milestones or advance payments, phased contracts, and small-business set asides.^{viii} Multiple industry commenters offered that DOE could propose small-business set-asides for specific aspects of the procurement, such as for technology, inventory management, or fleet maintenance. Another alternative structure proposed by industry commenters was a phased approach to contracting. A majority of commenters favored this approach, noting that it suited the types of activities to be undertaken.

“We concur that utilizing a phased approach with multiple awards for each phase will provide greater assurance of overall programmatic success for such a complex comprehensive program. Promoting such healthy competition will minimize DOE’s risk and long-term commitments that ultimately limit competition and programmatic flexibility” (British Nuclear Fuels Limited comments on January 2004 NOPI). [8]

Still, other commenters offered variations on a phased approach. Multiple industry commenters noted that the SOW could be divided based on services it addressed, explaining that such an approach could help ensure the most qualified bidder would be selected for the appropriate SOW:

“An alternative approach to the proposed procurement...divides the work scope into two separate pieces. One piece is the traditional transportation brokering, planning, and logistical support. The second piece is the design, licensing, and fabrication of the fuel transportation and storage hardware. By separating the proposed procurement into two distinct pieces, the DOE can be assured of having the most qualified and highest value vendors in each area of specialty” (Westinghouse comments on December 1996 RFP). [4]

Nearly all commenters noted that, regardless of the path DOE may take, DOE should allow for alternative approaches to be included in future RFPs.

CONTRACTING AND PROCUREMENT STRATEGY

Proposed Strategies

Commenters also offered feedback on strategies for the procurement. Nearly all commenters rejected the idea of a regional approachⁱⁱ in favor of an integrated approach that allowed for consistency. Industry commenters also maintained that any sound approach for DOE should include options for DOE to combine elements of competing proposals.

Numerous industry and utility commenters noted that a sensible strategy would entail creating multiple SOWs and dividing them based on which party was best suited for those duties. Multiple industry commenters expressed the view that the federal government may be best suited to perform certain duties, such as emergency response training, public outreach and stakeholder engagement, establishment of contracts with rail carriers, and determinations on route selection. Multiple commenters elaborated that a single contract and bid package could be established for heavy-haul activities, another for any maintenance facilities needed, and additional contracts for transportation activities (including logistics, utility interface, determination of hardware) and have cask suppliers respond to specific design bids.

Numerous industry commenters also noted that DOE should adopt a strategy of lowest reasonable cost, while balancing prior experience and capabilities. However, State, Tribal, and local government commenters expressed concern, observing that in the past, DOE policy had placed contracts with the lowest bidder, creating a disincentive for contractors to be responsive to stakeholder recommendations that increased costs, such as

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stakeholder engagement or safety requirements. They noted that DOE adopting an approach that focused on lowest reasonable cost could undermine public trust and confidence, particularly relating to the perceived public safety of shipments.

“Is reliance on a contractor whose bid was cheapest sufficient to guarantee safety for the 50 years foreseen for transportation?” (Public Service Electric comments on December 1996 RFP). [4]

Yet, among commenters who expressed concern, an important distinction was made regarding the degree to rely on contractors; numerous State, Tribal, and local government commenters were not necessarily opposed to DOE utilizing a more market-driven approach. Numerous State, Tribal and local government commenters expressed the view that key responsibilities should remain within DOE’s purview and there should not be a “wholesale delegation of responsibilities.” These commenters emphasized that the inclusion of safety requirements and an emphasis on risk-management must be incorporated into the SOW, both in performance criteria and folded-in throughout the document.

Need for Greater Clarity

A resounding theme expressed by commenters was that there existed a fundamental lack of clarity and that any future efforts to draft an RFP, SOW, or other potential initiative would benefit from addressing the issues outlined below. Numerous utility commenters offered that DOE must clearly define the SOW, risks, and rewards in order to allow bidders to make accurate estimates and provide competitive prices. Such specificity would facilitate more responsive proposals. Furthermore, commenters noted that there must be clear distinctions between policy decisions and operational decisions. Numerous State commenters underscored that the rationale behind why a decision was made was critically important and should be communicated.

Industry, utilities, and State, Tribal, and local government commenters were aligned in their comments that as DOE moved forward, it should strive to make roles and responsibilities of all parties (not simply DOE and its contractors) distinct and clear. Significant confusion also surrounded interface with utilities, responsibility for communicating with States, Tribes, and local governments, responsibility for public communication, route selection and modal choice, and development of various plans (Institutional, Transportation Site Servicing, etc.). Commenters maintained that any future efforts would receive more accurate bids and have a greater chance of success if such items were addressed.

Requirements of Bidders and Selection Criteria

To refine a potential SOW, industry, utility, State and local government, and NGO commenters offered recommendations on potential bidder requirements, and they noted that DOE should clarify what guidelines would be used for selection of a contractor. In any future scenario, numerous commenters requested that pre-award assessments of key contractors be undertaken to determine whether prospective contractors were responsible. Commenters also offered a range of requirements to assess bidders, including but not limited to the following: past performance information, regulatory compliance information, insurance and financial data (including ability to withstand a financial blow), technical data, as well as safety data. Most respondents also emphasized that qualification criteria should include more than one shipping campaign. Furthermore, multiple commenters also requested that experience required of bidders must be limited to recent experience:

“Qualification criteria should be limited to recent experience with major transportation and logistics coordination activities involving spent nuclear fuel and other high-level radioactive waste” (Tri State Motor Transit Company comments on December 1997 RFP). [5]

Commenters also offered a variety of potential criteria that could be used to judge performance. Some suggested criteria were: timeliness of achieving operational readiness, achievement of cost and schedule goals, safety, compliance with schedule, cost reductions, safety record, and innovative design concepts and materials.

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Additional Recommendations

Respondents recommended certain items should potentially be included in any future RFP. Recommendations included incorporating a timeline with major milestones outlined; inclusion of all applicable regulations, standards, and DOE Orders; clarification of utility interface issues; clarification of DOE and contractor roles in interfacing with State, Tribal, and local governments; an emphasis on safety, inclusion of staffing plans and a strategy for identifying, hiring and training personnel; inclusion of mechanisms to resolve conflicts; and inclusion of cash performance incentives.

Additionally, numerous NGO and State, Tribal, and local government commenters stressed the need for inclusion of community investment requirements.

“DOE should consider incorporating a community investment component to the final RFP selection criteria...The community investment component usually requires proposers to describe initiatives they will take to invest in and otherwise benefit communities affected by contractor activities (i.e. intermodal transfer facilities). Initiatives undertaken by proposers have included establishment of local procurement outreach programs; sponsorship of community events and activities; investment in community facilities, and provision of technical assistance (i.e. emergency management training) to local entities, among others” (Tri State Motor Transit Company comments on December 1997 RFP). [5]

Commenters also noted that a mechanism for engaging with stakeholders and consulting with States, Tribes, and local governments should be included in a SOW. State, Tribal, and local government commenters, as well as industry commenters, noted that there must be more clarity regarding the role of DOE in communicating with the public. Furthermore, commenters emphasized that a SOW must include definitions for communications and public outreach, and SRGs explained that consultation with State, Tribal, and local agencies differed from interactions with the public.

CONCLUSIONS

Through analyzing public comments from previous DOE transportation acquisition initiatives related to SNF and HLW, several key themes arose, including the risks that industry faces, the numerous uncertainties that may impact a potential contract, the inherent limitations in fixed-price contracts, and feedback on potential contracting and procurement strategies, requirements of bidders, and elements to include in a potential SOW.

Irrespective of the path DOE chooses to take moving forward, there are important lessons to be learned from public comments reviewed. Considerations raised by public commenters are useful to examine, as they are destination-independent and remain equally applicable to either an interim storage facility or a geologic disposal site.

Gaining a more thorough understanding of stakeholder input may help inform DOE’s approach moving forward. By analyzing comments spanning multiple decades and encompassing numerous DOE transportation acquisition requests for comment, insight can be gained on previous transportation privatization efforts, allowing DOE to better understand and anticipate key issues relevant to the nuclear industry and other stakeholders, draw from lessons learned, and identify likely areas of contracting-related transportation concerns moving forward. As outlined in the quote below, a significant challenge for DOE lies in the broader institutional decisions that will need to be made:

“The Department’s greatest challenge is simply to define the ground rules, provide a level playing field and put mechanisms in place that nurture, rather than impede, maximum use of the private sector and freedom of choice” (NAC International comments on May 1996 RFP). [3]

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5. 62 FR 63700. “Notice of Revised Draft Request for Proposals for Waste Acceptance and Transportation Services” (December 2, 1997).
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11. 81 FR 74779-74780. “Office of Nuclear Energy; Request for Information on Approaches Involving Private Initiatives for Consolidated Interim Storage Facilities” (October 2016).

ⁱ Fixed-price contracts have payment amounts independent of resources used/time expended (as opposed to cost-plus contracts, which are intended to cover costs with additional profit made).

ⁱⁱ Each RSA or RSC would have been responsible for all activities and services (in up to four regions), including the provision of transportation and storage casks, canisters, and ancillary equipment. The various RFPs were updated to incorporate feedback received from stakeholders. A key change is reflected in the October 2002 *Special Notice and Draft SOW for a Transportation Integration Contractor* (TIC). DOE’s previous strategy, which relied on RSCs, shifted to rely on TICs, which would assist DOE in carrying out transportation planning, equipment acquisition, and mobilization activities.

ⁱⁱⁱ Form letters are standardized comment letters written from a template (often verbatim) developed by a particular organization and adopted, distributed, and submitted by numerous commenters. Form letters were processed and analyzed differently. The original form letter received was analyzed and categorized once and treated in the same manner as all other (unique) comment letters received. Every additional form letter submission (copies of the original) was analyzed for any unique characteristics or comments. Any unique comments contained in the form letter were then categorized and included in this analysis. If the form letter submitted was identical to the original form letter, it was not analyzed a second time. However, the number of times it was received was recorded, but only new/unique comments that an author added to their form letter were recorded.

^{iv} A sampling of categories that were developed included: Transportation, Privatizing, Specific Recommendations on Scope of Work, Contracting Process, DOE Commitments and Legal Obligations, Tribal Considerations, Delegation of Roles and Responsibilities, Public Safety and Standards, Section 180(c) of the NWSA, Public Engagement and Communications, and Off-Topic.

^v Some comments for the *Special Notice and Draft Statement of Work for A Transportation Integration Contractor* were unable to be located (10 comments and a summary table of comments were found out of 41 total). Efforts were made to find these comments by contacting previous staff but not all comments were located. For the *Notice of Program Interest Approach to Procure the Design and Fabrication of Shipping Casks*, staff was only able to locate 4 out of the 7 comments.

^{vi} For further discussion of themes, see Rodman, Lauren, Helvey, Elizabeth, and Maheras, Steven. “Perspectives on Previous DOE Transportation Acquisition Efforts.” Waste Management Symposium, Phoenix, AZ (March 2019).

^{vii} The RFPs examined in this analysis were structured such that potential bidders had to reapply for each subsequent phase of the contract (every five years). Therefore, a company could potentially bid and win during the first phase of a contract but then lose out during the second phase.

^{viii} Cost-plus contracting is a contract where a contractor is paid for all allowed expenses plus additional payment (allowing for a profit). Cost-reimbursable contracting includes contracts where a contractor is paid for all allowed expenses to a set limit, plus additional payment to allow for profit. Pay-as-you-go contracts determine payment amounts throughout the period of the contract; phased contracts are divided into distinct phases (such as for different types of services or time periods); and small-business set asides are contracts set aside by the Small Business Administration in order to help businesses compete in bids for federal services.