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RE: Response to RFI on Private Initiatives to Develop Consolidated SNF Storage Facilities

Southwest Research and Information Center (SRIC) is a 46-year-old nonprofit organization based in Albuquerque, New Mexico that has extensive involvement throughout its history with nuclear waste facilities, including the Waste Isolation Pilot Plant (WIPP), the Department of Energy (DOE) first- and second-round repository siting in the 1980s and the recent consent-based siting process. SRIC also was actively involved in the proposed private off-site consolidated spent nuclear fuel (SNF) facility on the Mescalero Apache Reservation in the 1990s.

SRIC strongly opposes private off-site consolidated SNF storage facilities, which would be dangerous because of the additional handling and transportation required, unnecessary because waste can and will remain at the existing reactor locations for decades, and expensive because they would substantially add unneeded costs to what will be an expensive repository program. Further, DOE is not allowed to fund activities at such private off-site facilities, nor take title to SNF at such sites under current federal laws.

Moreover, such facilities have been tried and failed in the past. In addition to the failed Mescalero proposal, several nuclear utility companies pursued the Private Fuel Storage (PFS) facility on the Skull Valley Goshute Reservation in Utah. PFS was licensed by the Nuclear Regulatory Commission (NRC) in 2006, but the site has never been used. No other nuclear utility company, nor group of utility companies, are pursuing such facilities, so there is no historic or current basis for the premise stated in the RFI: "PIs represent a potentially promising alternative that can be used either solely or in addition to federal facilities for consolidated interim storage" (pages 1-2).

Consequently, SRIC requests that DOE:

- \* publish all of the submissions to the RFI (as it has promised to do in 81 FR 74780-October 27, 2016),
- \* respond publicly to all of the submissions, and
- \* terminate its process to encourage private initiatives for consolidated SNF storage facilities. Thus, the proposed "presentations" by respondents to this RFI at DOE Headquarters should not occur. If DOE does proceed with this idea, all respondents, including SRIC, should be invited and allowed to make such presentations, if they so desire. SRIC requests to make such a presentation, if any other presentations are invited or allowed.

There is a fundamental question that must be answered by nuclear utility companies and the DOE prior to further consideration of private off-site consolidated SNF storage facilities. That

question was inappropriately not included in the RFI. Thus, the RFI is inadequate. That question is:

Since the NRC has found that on-site SNF storage is safe for decades, and since some advocates of consolidated storage say it would provide economic benefits, why are no nuclear utility company(ies) volunteering for consolidated on-site SNF storage?

Nuclear utility companies and their ratepayers have received the electricity and financial benefits of nuclear power. The utilities have the experience, work force expertise, facilities and equipment to manage SNF on-site. The utilities and NRC say that they can safely store the waste on site for decades. Thus, continued on-site storage has regulatory sanction, is necessary, and will be paid for by the owners and ratepayers, as current law and good public policy require. (SRIC advocates improved robust storage at reactor sites.)

In contrast, the concept of “private initiative” has been tried and rejected in the past and is being rejected by those with the most expertise and knowledge, as well as those that actually own the SNF. So the possible “volunteer, consenting” private companies and communities have rejected private on-site and off-site consolidated SNF storage. DOE should not be promoting or even considering, such a failed concept.

Importantly, federal law and policy is for disposal through geologic repositories, and federal law does not allow DOE to pay for or take title to SNF at consolidated storage site(s). The Nuclear Waste Policy Act (NWPA) specifically provides that the nuclear utilities pay for storage and that the federal government will not take title to spent fuel until it is received at a repository:

The generators and owners of high-level radioactive waste and spent nuclear fuel have the primary responsibility to provide for, and the responsibility to pay the costs of, the interim storage of such waste and spent fuel until such waste and spent fuel is accepted by the Secretary of Energy in accordance with the provisions of this Act [42 U.S.C. 10101 et seq.] 42 U.S.C. § 10131(a)(5).

That law further states:

DOE shall “take title” to spent fuel only “following commencement of operation of a repository.” 42 U.S.C. § 10222(a)(5)(A). See also Final Interpretation of Nuclear Waste Acceptance Issues, 60 Fed. Reg. 21,793, 21,795 (May 3, 1995) (concluding that “the mandate to dispose and the duty to take title must be read together.”)

The RFI and *Federal Register* notice are grossly inaccurate and misleading in never mentioning the existing legal prohibitions to such a private, off-site consolidated SNF facility. Contrary to existing law, question 5 presumes that the federal government would pay for consolidated storage. As part of the requested termination of this process, DOE should explicitly acknowledge those legal prohibitions, as well as the history of failures of such private, off-site consolidated facilities, and the continuing strong public opposition to any such sites.

The only current private initiative consolidated storage facility that is in the NRC licensing process was submitted in April 2016 by Waste Control Specialists (WCS). NRC Docket 72-1050.

That application specifically states that “[t]he U.S. Department of Energy (DOE) will be contractually responsible for taking title of the spent fuel at the commercial reactor sites and transporting the spent fuel to the CISF, by rail.” (p. 1-1). This assumption of federal payment, transportation, and ownership of spent fuel is central to WCS’ license application: WCS has stated that it does not intend to build or operate the proposed facility unless and until the federal government takes title to the spent fuel. License Application at 1-6 (“WCS shall not receive [spent nuclear fuel] until such a contract with the DOE is provided to the NRC as a condition of the license.”).

Clearly, advocates of off-site consolidated SNF storage, such as WCS, will not proceed with consolidated storage under existing law, and they want to change the law. That is the apparent answer to the fundamental question: nuclear utilities and potential consolidated storage sites do not want to do consolidated on-site storage; instead they want to change the law and have the federal taxpayers pay for consolidated storage and have the federal government take title to and assume liability for the SNF.

The law has not been and should not be changed to allow private off-site consolidated storage. Instead, SNF storage must continue at reactor sites while they are operating and will continue at closed reactor sites for years until there are repositories or until one or more utility companies volunteers to do consolidated storage at reactor site(s), paid for by the utility companies, which could be done under existing laws if such facilities meet NRC licensing requirements.

Handling and transporting waste from reactors to repository sites would be dangerous as the SNF would be packaged and loaded at the reactor site, transported, unloaded at the repository, and handled and emplaced in the repository. Off-site consolidated storage would still require all of those processes, and additionally additional activities: unloading SNF at the storage site, storage, re-loading of the waste for transportation to a repository, not to mention any repackaging required or handling of leaks or accidents at the storage site. Those additional processes related to consolidated storage increase dangers and risks to workers and the public. They are unnecessary, as the SNF can stay at reactors. Of course, those additional procedures would cost billions of dollars, most likely adding to the total costs of the waste management system.

Furthermore, SRIC believes that there should be a consent-type process for private off-site consolidated SNF storage not only of the most directly affected local communities and state and tribal governments, but also for adjoining communities, tribes, and states, and for corridor states, tribes, and communities. For example, in the proposed WCS consolidated storage facility, not only Andrews city and county, and Seminole city and Gaines County, Texas and Texas state government would need to consent, but also adjacent communities of Eunice, Jal, and Hobbs, Lea County, and New Mexico state government. Many additional communities in Texas and New Mexico would be affected by transportation, and numerous other states, tribes, and communities would be affected by transportation between reactors where SNF is stored and WCS.

Also, there is no basis to assume that off-site consolidated storage would be “interim” and limited to a few decades, as WCS presumes. The NWPA was passed by Congress on December 20, 1982, after more than five years of public and private debates and meetings, committee hearings on multiple bills, committee markups and bill passage, House and Senate floor debates and voting, and conference committee negotiations and final passage by the House and Senate. The bill was signed into law by President Reagan on January 7, 1983. Thirty-four years later, there is still no viable repository site as Yucca Mountain is technically flawed and strongly opposed by the State of Nevada’s citizens, state government, and federal officials. There is no consent for Yucca Mountain. There is no reason to believe that new legislation to enact a new repository program would not take several years and that implementation of a new repository program would require longer than even the DOE’s proposed 2048 opening date. Thus, there is no basis to project that an off-site consolidated storage site would not need to operate for a century or more. In fact, there is significant evidence and opinion that if there were off-site consolidated storage, the likelihood of implementing a repository program would even further diminish because the linkage between storage and disposal would disappear. Thus, in addition to clearly being dangerous, unnecessary, expensive, and contrary to federal law, it is likely that off-site consolidated storage would make a technically sound, publicly accepted disposal program even less likely.

Regarding the twelve questions in the RFI:

1. What key factors should be considered to ensure that PIs, as part of the overall integrated nuclear waste management system, would provide a workable solution for interim storage of spent nuclear fuel and high-level waste?

Answer: PIs are not a workable solution, nor is off-site consolidated SNF storage a viable part of a technically sound, publicly accepted nuclear waste management system. DOE should cease its efforts to encourage PIs and off-site consolidated SNF storage. See pages 1-4 above.

2. How could a PI benefit:

- a. the local community and state or Tribe in which an ISF is sited?
- b. neighboring communities?

Answer: PIs are not a workable solution, nor is off-site consolidated SNF storage a viable part of a technically sound, publicly accepted nuclear waste management system. Local communities, states, and tribes could not enforce “benefits” from such storage under existing or possible future laws and perhaps could not do so if there were a Constitutional amendment. Even the promise that a site would be “interim” could only occur if there were legal and practical means to move the SNF back to the reactors from which it came or to other facilities. That’s a power that local communities and even states or tribes do not have. Just as local communities, states, and tribes where SNF is currently stored at reactors do not have to authority to require the waste to be moved to some other location, so too that power would not exist for a private off-site consolidated storage site. See pages 1-4 above.

3. What type of involvement if any should the Department or other federal agency consider having with the PI and the community regarding organizational, structural, and contractual frameworks and why?

Answer: PIs are not a workable solution, nor is off-site consolidated SNF storage a viable part of a technically sound, publicly accepted nuclear waste management system. DOE should cease its activities related to PI and consolidated SNF storage facilities. See pages 1-4 above.

4. What are the benefits and drawbacks of a PI, compared to a federally-financed capital project resulting in a government-owned contractor-operated (GOCO) interim storage facility?

Answer: The question erroneously presumes that a GOCO facility is a viable option. It is not. Such a facility was proposed by DOE at Oak Ridge, Tennessee in the 1980s and was rejected by the State of Tennessee and its citizens. The DOE proposal was specifically “annulled and revoked” by the NWPA Amendments Act of 1987 (Section 12(a)). While that law did authorize DOE to site, construct, and operate a monitored retrievable storage facility subject to the provisions of the law, DOE has never proceeded with that process. Nor has Congress appropriated funding for such a facility. Off-site consolidated SNF storage facilities are not a viable option and should not be pursued by DOE. See pages 1-4 above.

5. What assurances to the Government do you think would be appropriate, to ensure that SNF stored at a private ISF, would be managed effectively so as to contain costs to the Government?

Answer: The question erroneously presumes that the federal government would pay the costs of private off-site consolidated SNF storage, even though it is directly contrary to existing law. The federal government should not pay for or take title to waste at any off-site consolidated SNF storage site. See pages 1-4 above.

6. What possibilities are there with respect to business models for a PI, and what are the benefits and disadvantages of those models?

Answer: The history of the past 30 years includes more than 20 proposals to the Nuclear Waste Negotiator in the early 1990s, the Mescalero Apache and PFS proposed facilities that were based on various business models. Since all of them have failed, there is no basis to believe that there is any viable business model. That is because off-site consolidated storage facilities are dangerous, unnecessary, and contrary to existing law. No reasonable company(ies) could develop a viable business model, given those realities. See pages 1-4 above.

7. How could a PI manage liabilities that might arise during the storage period?

Answer: Of the many proposals for off-site consolidated storage, the only one that attempted to manage such liabilities was PFS. But it never succeeded in operating. No other private entities have proposed that they could manage those liabilities. So there is no basis to presume that such liabilities could be managed, especially since there is no basis to presume that there could be any definite “storage period” because of the lack of viable repositories or the legal and practical requirement that the SNF could and would be removed at the end of any “storage period.” See pages 1-4 above.

8. What state/local/tribal authorizations/approvals would be needed?

Answer: Any off-site consolidated SNF storage facility would require approvals from community, state, and tribal governments. Approvals at multiple times and public referenda are

also likely. In addition, adjacent communities, states, and tribes would have to approve, also likely at multiple times and perhaps with public referenda. Additionally, corridor communities, states, and tribes should provide approvals for any publicly accepted facility. See also page 3, above.

9. How can the Government continue to explore or implement the PI concept in a fair, open and transparent manner going forward?

Answer: The DOE process so far has not been adequate and fair. The RFI and *Federal Register* notice are fundamentally flawed by not correctly describing the legal status that DOE cannot pay for or take title to waste related to a consolidated SNF storage facility. Neither document recognizes the history of failure of such facilities. Neither document specifies that such facilities are dangerous, unnecessary, and not publicly accepted. DOE should terminate this process after publishing all of the submissions and its responses. See pages 1-4 above.

10. What, if any, supporting agreements might be expected between the Government and the host state/tribe/local community associated with a PI?

Answer: There should be no presumption as to what agreements would be expected. It should not be expected that any agreements would only be for financial, research, or educational benefits, as often seem to be the basic discussion. For example, some entities might require that all nuclear power plants be shut down before a facility could operate so that the total amounts of SNF that would exist would be known. Some entities might require that other storage or disposal sites exist as a condition to receive any SNF to provide greater assurance that the facility would operate only for a certain period of time and for a certain amount and type of SNF. See pages 1-4 above.

11. What other considerations should be taken into account?

Answer: PIs are not a workable solution, nor is off-site consolidated SNF storage a viable part of a technically sound, publicly accepted nuclear waste management system. DOE efforts related to PIs and off-site consolidated storage should cease once the responses to the RFI are published and DOE responds to all of those submissions. See pages 1-4 above.

12. Are there any alternative approaches to developing non-federally-owned facilities that might be proposed (e.g. how projects would be financed, anticipated regulatory and legal issues, etc.). If so, what are they, are there proposed solution, and how would the above questions be answered with respect to such approaches?

Answer: No. PIs are not a workable solution, nor is off-site consolidated SNF storage a viable part of a technically sound, publicly accepted nuclear waste management system. DOE should cease efforts related to PIs and off-site consolidated storage once the responses to the RFI are published and DOE responds to all of those submissions. If DOE supports the Blue Ribbon Commission recommendation for a new organization to implement the waste management program, it should cease its current program, which could be contrary to what the new organization would do. Clearly, efforts such as the borehole research program that resulted in public opposition and termination of the contract, waste money and further undermine the DOE credibility. Ceasing its activities would further clarify for Congress that a new waste

management program and new organization are required. Such a DOE approach could help Congress to initiate the difficult, but necessary, long-term public process to develop a technically sound, publicly accepted new legal framework for nuclear waste management and disposal that also terminates Yucca Mountain and addresses the federal financial liability issues. Such an approach also could require utilities to provide more robust on-site storage. See pages 1-4 above.

Thank you for your consideration and response.

Sincerely,

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