Private ISF

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Sent:

To:

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

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To: U.S. Department of Energy (DOE) Office of Nuclear Energy

Email to: PrivateISF@hq.doe.gov

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

Re: Request for Information on Approaches Involving Private Initiatives for Consolidated Interim Storage Facilities 81 Federal Register No. 208 Thursday October 27, 2019 page 74779

Date: January 27, 2017

The U.S. Department of Energy (DOE) should withdraw the Request for Information on Approaches Involving Private Initiatives for Consolidated "Interim" Storage Facilities and cease all consideration of such facilities.

The Sustainable Energy & Economic Development (SEED) Coalition agrees with the comments submitted by NIRS, Nuclear Information and Resource Service. SEED Coalition also contends that the Department of Energy has no legal justification for considering private initiatives for Consolidated Storage because Consolidated Storage facilities in the absence of a permanent repository are not legal under the existing Nuclear Waste Policy Act.

Section 111 of the Nuclear Waste Policy Act specifically provides that the federal government will not take title to irradiated ('spent") nuclear fuel until it is received at a repository. [42USC10101et seq. and 42USC 10131(a)(5)] The law wisely links the relationship between storage and permanent disposal. The efforts for Consolidated Storage without linkage to permanent system and facility to isolate the waste are not credible.

The Nuclear Waste Policy Act requires a permanent repository before title and liability to the irradiated fuel from nuclear power can be transferred to the DOE, essentially the U. S. taxpayer (except in an emergency which does not apply to the DOE's private initiatives concept). Nuclear utilities and merchant plant owners, that generate the nuclear waste, will not move it from their sites without transferring the title and liability. Thus, Consolidated "Interim" Storage sites will not be possible or practicable without DOE taking title.

Private entities appear to be motivated to consolidate high-level radioactive waste so as to profit from nuclear waste fund and possibly the money that is being paid out from the US Treasury in judgments. Rather than benefitting private corporations, these resources should be used to manage and isolate radioactive waste.

There are basic problems with Consolidated Storage including unnecessary transport risks and dangers, potential for reprocessing and proliferation of radioactive materials for weapons and dirty bombs. Use of the same storage technology as at reactor sites provides no increase in protection, only added risks from transport.

Most of the questions posed in the RFI assume Consolidated Storage is legal and move into details that ignore the larger reality that the whole concept is flawed. Our input here is designed to address all of the questions asked, with emphasis on the Consolidated Storage concept overall.

Key objectives of any strategy to manage our country's stockpile of nuclear waste, in addition to limiting further production of waste, must be to utilize the most secure and least risky storage, allowing for monitoring, inspection and repair and minimizing the number of times radioactive waste is handled and transported. The proposal to move nuclear waste to one or more Consolidated Storage facilities does not meet these objectives, whether by government or private initiative. Consolidated Storage hinders efforts to meaningfully address broader storage and disposal issues. Adopting a plan to move waste around the country without a permanent disposal isolation system and facility in place would be pose risks for the community receiving the waste, since there the site could become a de facto permanent disposal facility, without adequate safeguards.

Transportation risks and hazards are compounded. Consolidation would multiply the distances high-level waste is shipped, and escalate the risks of public and worker exposure and contamination due accidents or terrorism incidents. It could further stress and potentially damage irradiated nuclear fuel and fuel casks, making future handling, transport, and long-term isolation from the environment more difficult.

Transporting waste to a Consolidated Storage site does not resolve existing vulnerability of nuclear waste storage. Reducing the inventory of irradiated fuel stored in liquid pools at reactor sites must be a top priority, as well as limiting the continued generation of the waste. Enabling Consolidated Storage does not ensure prompt removal of waste from pools at all sites. The waste must be adequately cooled before dry cask storage is undertaken, and shortcuts on cooling must be avoided for safety purposes.

Consolidated Storage sites could--in fact likely will--become de facto permanent sites even though they are only being evaluated for relatively short time frames. This could result in a disastrous future scenario, with casks deteriorating in the hot desert sun and extreme weather conditions present in West Texas or New Mexico if those sites are approved. Some of the

existing Holtec casks are rated to withstand temperatures up to 101 degrees, but not the 110 degree temperatures that occur at the WCS site. Time and weather are likely to lead to cracks in the cask systems and as of this time, no transfer from dry cask to dry cask has yet been undertaken. It appears the technology is not in place. We should prevent scenarios where cask degradation could lead to radiation leaks and potential criticality disasters.

As indicated earlier, under the Nuclear Waste Policy Act of 1982, the federal government will not take possession of commercial nuclear waste until it goes to a permanent repository. There is no such site in place and Yucca Mountain is technically not qualified. Effort and resources should be expended for planning for the both short and long term isolation of the waste, not moving it thousands of miles across the country with no permanent disposal plan or facility in place.

A strategy is needed that prioritizes safety and security, not shifting liability and triggering a massive, unprecedented transport campaign on the nation's railways, and perhaps highways and waterways as well.

Moving irradiated nuclear fuel and other high-level wastes to a Consolidated Storage site could be a disincentive for progress of the nation's efforts toward a scientifically viable permanent disposal system and facility. The Nuclear Waste Policy Act wisely links the relationship between storage and permanent disposal. The efforts for Consolidated Storage without the linkage to permanent system to isolate the waste are unwise and don't meet policy requirements.

True consolidation of waste is not possible as long as nuclear utilities continue to generate waste. As long as nuclear power plants continue to operate, nuclear waste will be present at reactors, as the waste must be cooled in pools before being moved to either on-site dry storage or an off-site storage facility. This fact, plus the decades it would take to ship the existing backlog of waste and the risks of unnecessary transport, are solid reasons not to consolidate irradiated fuel. Hardened, monitored, on-site storage, at or near site the site of generation, is the least dangerous option for now.

Consolidation would increase the probability of reprocessing, a dangerous, dirty and expensive process that even some nuclear proponents oppose. Reprocessing has been suggested in addition to consolidated storage sites being proposed. It would result in massive separation of plutonium but there is no way to ensure that weapons grade plutonium would not be diverted, officially or unofficially, for use in weapons of mass destruction. Reprocessing has failed in this country and shouldn't be revived. It weakens global non-proliferation efforts. It is not a viable waste

management strategy, as reflected in the dismal history at West Valley, NY, where the only commercial reprocessing site in the US now requires a \$5 -10 billion "clean up". The Blue Ribbon Commission report admitted that reprocessing does not significantly reduce the radioactivity of the waste that must be stored in a repository. In fact, there has been no resolution for dealing with the millions of gallons of toxic waste generated by irradiated fuel reprocessed in the United States decades ago.

Consolidated Radioactive Waste Storage does not honor the "polluter pay" principles established in the Nuclear Waste Policy Act of 1982.

Exemption of waste generators from continued financial responsibility for waste generated prior to emplacement in a bona fide permanent isolation location is a striking change from the existing statute and is an additional important argument against Consolidated Storage.

Furthermore, SEED Coalition has concerns that any private facility operating a Consolidated Storage facility would be prone to cost-cutting measures designed to maximize corporate profit would undermine safety considerations, and that key public accountability information will be obscured under false confidentiality claims. We consider the involvement of any private corporation in Consolidated Radioactive Waste storage to be incredibly risky.