

Private ISF

From: Satya Vayu <satyavayu@gmail.com>
Sent: Friday, January 27, 2017 4:30 AM
To: PrivateISF
Subject: Response to RFI on Private Initiatives to Develop Consolidated SNF Storage Facilities

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?

Since a private centralized interim storage facility could easily become a de facto permanent parking lot dump, or could one day well be targeted not just for storage but also for permanent disposal (such a preference has been expressed in related legislation on Capitol Hill, that the pilot-, and full-scale, centralized interim storage site also be considered for permanent disposal), the following criteria must be met: scientific (geologic, hydrologic, etc.) site suitability; free, fully informed, consent-based siting; environmental justice, not just for current, but also for all future generations.

In addition, since consolidated interim storage would require unprecedented numbers of shipments (by road, rail, and/or waterway) of highly radioactive irradiated nuclear fuel, through many to most states, such "Mobile Chernobyl" risks must be minimized. (See, for example, projected nationwide shipping routes to Yucca Mountain, Nevada <<https://www.nirs.org/stop-fukushima-freeways/>> , which has been targeted for governmental (DOE) centralized interim storage in the past, and is still targeted for permanent disposal; see also projected cross-country shipping routes to the PI Waste Control Specialists, LLC facility in Andrews County, West Texas <<http://static1.1.sqspcdn.com/static/f/356082/27010338/1462424717363/Transportation+Maps-1.jpg?token=TM%2FbJ6JhFDsgOA%2BtLMiwPmZVELk%3D>> , targeted for centralized interim storage.) Long-distance shipments should only happen once, to suitable, consent-based, environmentally just permanent disposal, not to a supposedly interim storage site, from which the wastes will have to move again, multiplying transport risks. Consent should be required for transport corridor communities for such shipments, and transport container safety and security should be guaranteed, requiring significant upgrades to current shipping container integrity standards.

2. How could a PI benefit:

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

Certainly pro-nuclear Republican U.S. Senators, during related Energy and Natural Resources Committee hearing in summer 2013, have joked openly about the "incentives" (legalized bribes, and other "inducements," such as promises of jobs, for low income, often people of color communities; however, as Keith Lewis of the uranium mining and milling devastated Serpent River First Nation of Ontario put it, "There is nothing moral about tempting a starving man with money.") that cut to the heart of tempting communities to consider "consenting" to "host" de facto permanent parking lot dumps. But what about the harms to communities, states, Tribes and neighboring communities that would be caused by de facto permanent parking lot dumps?

For starters, low income people of color communities must be taken off the target list, as a basic Environmental Justice principle. To do otherwise would mean radioactive racism. Even people of color communities which are no longer low income should not be targeted, given the historical oppression they have already endured in the United States. Neither should majority white low income communities be targeted.

Radioactive stigma impacts should be addressed and accounted for, from the start. Even if a release of hazardous radioactivity into the environment does not occur, property values will be significantly decreased at and near a centralized interim storage site, as well as along transport corridor routes. Radioactive stigma will even mean that products from the area of the centralized interim storage facility will be avoided by a significant share of consumers,

causing economic losses. So too would other economic development be deterred from the region of the de facto permanent parking lot dump.

And if a release of hazardous radioactivity does occur, the radioactive stigma impacts to the economy will be all the worse.

Neighboring communities can expect to get the worst of both worlds. The host community will reap the income, tax revenues, and jobs, while neighboring communities will get the short end of the stick -- which would include radioactive stigma impacts, but also the potential for hazardous radioactivity release into air, surface waters, and groundwaters if they happen to be located downwind and downstream.

Native American "Tribes" -- Indigenous Nations -- should not be targeted at all for such hazardous high-level radioactive waste storage facilities. To the contrary, Indigenous Nations have been disproportionately targeted, for decades, an environmental injustice and form of radioactive racism
<<https://web.archive.org/web/20160131160214/http://www.nirs.org/radwaste/scullvalley/historynativecommunitiesnuclearwaste06142005.pdf>> . Beyond Nuclear and others pleaded with the Blue Ribbon Commission
<http://www.beyondnuclear.org/storage/kk-links/kevin_kamps_comments_to_chu_brc_march_26_2010.pdf> on America's Nuclear Future (BRC), from its opening meeting onwards, to no longer target Indigenous Nations. President Obama's Women's History Month, 2009 proclamation honoring Grace Thorpe
<<http://www.beyondnuclear.org/storage/kk-links/Obama%20proclamation%20on%20Grace%20Thorpe.pdf>> of the Sauk and Fox Nation in Oklahoma for her work to stop centralized interim storage sites targeted at her reservation community, and scores more, was cited to the BRC. Such comments fell on deaf ears at the BRC, and DOE is still targeting Indigenous Nations, to the present day.

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

Mention of "the Department or other federal agency" is an important reminder that the DOE should not even be conducting this Request for Information proceeding. The second highest recommendation by the BRC was for DOE to be removed from high-level radioactive waste management. This is because DOE has proven, over the course of decades, its incompetence and worse -- that it cannot be trusted by the public, in such vital matters. Such high-stakes matters as defining "consent-based siting" should be carried out by a trustworthy and competent replacement for DOE. A competent and trustworthy replacement for DOE would not have even considered PIs for centralized interim storage, since this violates the law, the Nuclear Waste Policy Act, as Amended.

Re: contractual frameworks, of course the consequences of any intentional wrongdoing, or even unintentional negligence, must be the liability of the PI. Otherwise, as Tom "Smitty" Smith of Public Citizen's Texas office has warned, this would "invite disaster because the private owners will be cutting costs at every turn to maximize profits." (See Additional sample talking points <<http://www.beyondnuclear.org/centralized-storage/2017/1/11/additional-sample-talking-points-you-can-use-to-write-your-o.html>> .) For example, Waste Control Specialists (WCS) in Texas has baked-in the contractual requirement, in its application for a license to construct and operate a centralized interim storage site, that DOE would not only hold title to the irradiated nuclear fuel, but would be entirely liable should anything go wrong (such as an airborne release of hazardous radioactivity, or a leak into the groundwater below, which could contaminate the Ogallala Aquifer). This of course means U.S. taxpayers would bear ultimate liability, and pay all costs. The Price-Anderson Act already provides liability protection unique in industry -- but even that isn't good enough for WCS! To remove all liability from a PI is a moral hazard with a radioactive twist, inviting catastrophe through company short cuts on safety, to pad their own pockets.

And of course U.S. congressional committees of jurisdiction, as well as Offices of Inspector General and Investigations, at all federal agencies with jurisdiction (DOE, NRC, EPA, etc.), should all be fully engaged, and do their jobs, to oversee and watchdog any centralized interim storage proposals, during licensing, operations, and decommissioning. Their duty, of course, is to protect public health, safety, security, and the environment, as well as taxpayer pocketbooks, not to cater to the nuclear power industry's or radioactive waste dumps' lobbyists.

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?

As mentioned above under point #3, DOE's name is mud when it comes to radioactive waste management. This includes GOCO endeavors such as the high-level radioactive waste liquid vitrification plant at Hanford Nuclear Reservation, which is many years behind schedule and billions of dollars over budget; as well as the utter failure at the Mixed Oxide Fuel Fabrication Facility at Savannah River Site, South Carolina, one of the worst boondoggles in DOE -- and in fact U.S. federal government -- history. As the BRC recommended as its second highest priority in its Final Report in January 2012, DOE must be replaced with a competent, trustworthy radioactive waste management federal agency.

5. What assurances to the Government do you think would be appropriate, to ensure that SNF [Spent Nuclear Fuel] stored at a private ISF [Interim Storage Facility], would be managed effectively so as to contain costs to the Government?

An important assurance would be, that hazardous radioactivity will not be released to the environment! No current or foreseeable PI can make such an assurance. For example, at WCS, NAC [Nuclear Assurance Corporation] dual-purpose storage/transport containers would be used. But such NAC containers have exhibited major Quality Assurance [QA] violations, and other failures <<http://www.beyondnuclear.org/waste-transportation/2016/12/21/nac-lwt-poor-qa-compliance-2015-2016.html>> , both historically dating back many decades (as documented in Dr. Marvin Resnikoff's 1987 book "The Next Nuclear Gamble"), but also very recently, as revealed at Chalk River Nuclear Lab in Ontario, Canada. Similarly, Holtec transport/storage containers proposed to be used at the Eddy-Lea [Counties] Energy Alliance in Hobbs, New Mexico have long exhibited uncorrected QA violations, calling into question their structural integrity while sitting still, let alone traveling 60 miles per hour or faster on the railways, as revealed by industry <<https://web.archive.org/web/20160130044911/http://www.nirs.org/radwaste/atreactorstorage/shiranialeg04.htm>> and NRC whistle-blowers <https://web.archive.org/web/20160331064027/http://www.nirs.org/radwaste/atreactorstorage/nrc_holtec.pdf> .

Any contracts signed by DOE's replacement radioactive waste management agency must be strictly fixed cost. Besides the multi-billion dollar cost overruns, and years-long schedule delays, at Hanford and SRS mentioned above, there is also the multi-billion dollar cost overruns, and years-long schedule delays, at the Vogtle 3 & 4 new reactor construction project in Georgia. DOE awarded Vogtle 3 & 4 a whopping \$8.3 billion federal loan guarantee, which means that U.S. taxpayers will be left holding the bag for that full amount, if and when the project defaults on its loan repayment. (In fact, such skyrocketing cost overruns <<http://www.beyondnuclear.org/nuclear-costs/>> and compounding schedule delays are not only a decades-old pattern with nuclear power plants and radioactive waste management facilities in the U.S., including DOE projects, but the same is also true internationally <<https://www.worldnuclearreport.org/-2016-.html>> ; remarkably, the public has been asked to bailout even 40+ year old, uncompetitive atomic reactors across the U.S., at ratepayer expense, in NY, IL, and perhaps even in Texas <<http://www.mysanantonio.com/opinion/commentary/article/Headwinds-threaten-Texas-nuke-plants-10872751.php>> , which is quite ironic, given WCS's lead in the race to open a PI parking lot dump.) In short, any to-be-expected cost overruns should be the responsibility of the PI, not of federal taxpayers.

Along similar lines, any PI should be required to be entirely privately financed, not government financed, to protect federal taxpayers' pocketbooks.

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

A prior PI that should serve as a cautionary tale was the Private Fuel Storage, LLC (PFS) targeted at the Skull Valley Goshutes Indian Reservation in Utah <<https://web.archive.org/web/20160220020229/http://www.nirs.org/radwaste/scullvalley/skullvalley.htm>> . In addition to being a flagrant radioactive racism violation of environmental justice principles, PFS also serves as a warning about how so-called interim surface storage facilities can turn into de facto permanent parking lot dumps. PFS was proposed to have stored 40,000 metric tons of commercial irradiated nuclear fuel (the same amount as is proposed

at WCS, TX), in Holtec containers (the same model as proposed by the Eddy-Lea Energy Alliance in NM). After 20 to 40 years of so-called "interim" storage (which is itself a very long time to refer to as temporary or interim -- in fact, 40 years is 1/6th as long as the entire history of the United States thus far!), the proposal was to then move the highly radioactive wastes to the permanent burial dump at Yucca Mountain, Nevada. However, President Obama wisely canceled the unsuitable, anti-consent-based, radioactively racist and illegal (it is Western Shoshone Indian land by "peace and friendship" treaty rights) Yucca dump in 2009-2010. Thus, if PFS had opened, and irradiated fuel would have been moved there, there would have been no Yucca dump to send it to after 20-40 years. PFS's Plan B was "return to sender." Thus, 50+ Holtec casks from Maine Yankee would have traveled 5,000-miles round-trip, accomplishing absolutely nothing -- but putting countless millions in transport corridor communities across the country at risk of "Mobile Chernobyls" and "Mobile X-ray Machines That Can't Be Turned Off." Fortunately, despite NRC's high-risk rubber-stamp of the PFS construction and operation license, resistance (including that by the nationwide environmental justice movement, led by Native Americans <<https://web.archive.org/web/20151020093406/http://www.nirs.org/radwaste/scullvalley/skullvalleygoshutesgroupplr772005.pdf>>) was strong enough to stop the parking lot dump from being built and opened.

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

As mentioned in response to DOE questions #s 3. and 5. above, all costs, liabilities, and risks should be borne by the PI companies involved, not by the public. If the PI companies are not willing to bear the burden of all liabilities involved in the centralized interim storage scheme, this is a clear sign that the proposal is too risky to undertake. To undertake it nonetheless, at taxpayer liability (such as called for by WCS in TX), would create a moral hazard with a highly radioactive twist!

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

As mentioned at point #2. above, Native American -- and other low income and people of color communities -- must be taken off the target list to begin with, as a basic matter of environmental justice principles.

But in addition, any targeted so-called "Interim Storage Facility" [ISF] location (including the transport corridor communities involved nationwide) must incorporate free-, fully informed consent-based principles, in addition to being scientifically suitable (geologically, hydrologically, etc.) and geographically sensible (such as re: transport risks; an example of regional inequity is the pattern of East dumping on West -- 90% of the atomic reactors in the U.S. are in the eastern half of the country, and yet all proposed parking lot dumps are in the western half of the country). Such consent-based siting must extend from the local level, to the county, regional, state, and national levels, including all impacted residents and their elected officials at all levels.

Any ISF PI must agree to bear the burden of full liability if anything goes wrong, and must agree to pay all costs associated with the facility -- not to burden the public (whether ratepayer or taxpayer) with any of this.

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

As mentioned in our response to DOE question #12. below, PI centralized interim storage is illegal under the terms of the Nuclear Waste Policy Act, as Amended. Thus, DOE should not go forward with this private initiative proceeding, or any other, as to do so would violate its legal authority. DOE should cease and desist from any further exploration of the PI concept, and should certainly not enter into PI contracts, as at WCS, TX.

Besides that, any undertaking of this significance should only happen under the strictest terms of the National Environmental Policy Act (NEPA), and also in compliance with the Atomic Energy Act (AEA) and Administrative Procedures Act (APA). This current Request for Information proceeding, by contrast, does not formally comply with NEPA, just as DOE's 2016 "consent-based siting" public comment proceeding did not comply with NEPA. This is unacceptable, and in fact illegal.

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

As mentioned in response to DOE's questions #3. and 7. above, all liability must remain with the PI companies, not with the federal taxpayer. And as mentioned in response to DOE's question #5. above, the PI companies must meet fixed costs commitments; any cost overruns would then be the private companies' problem, not DOE's (that is, not taxpayers'). And again, DOE and its replacement radioactive waste management agency must agree, once and for all, to stop targeting Native American communities, as well as any other low income and/or people of color community, for de facto permanent parking lot dumps.

11. What other considerations should be taken into account?

Re: DOE's question #8. above, there is also the issue raised by Allison Fisher of Public Citizen at DOE's "kick off" meeting for defining "consent-based siting," held in Washington, D.C. in January 2016. What about future generations? How can current generations of decision makers doom all future generations to radioactive risks, by agreeing to "host" storage and/or disposal (as EPA has acknowledged in its Yucca Mountain regulations, irradiated nuclear fuel and high-level radioactive waste has a million-year hazard, which happens to be three times longer than Homo sapiens sapiens has even been a distinct species!). To this important question on intergenerational equity and environmental justice, DOE gave no adequate answer that day, nor has it since.

In addition, DOE must address the risk of so-called interim storage becoming permanent parking lot-like surface storage. In its Final Environmental Impact Statement (FEIS) for the proposed dump at Yucca Mountain, Nevada, published in February 2002, DOE warned that permanent abandonment of irradiated nuclear fuel on-site at the reactors where it was generated would result in catastrophic releases of hazardous radioactivity into the local environment, as dry casks failed over time. DOE must admit, clearly and publicly, as in a PI centralized interim storage EIS, that abandonment of irradiated nuclear fuel at a so-called ISF (Interim Storage Facility) would likewise result, over long enough periods of time, in dry cask failure, and catastrophic releases of hazardous radioactivity into the environment.

Along those lines, this Request for Information proceeding is not compliant with NEPA. DOE must publish a Draft EIS, allow for public comment over an adequate period of time (we suggest a nine-month public comment period), and hold multiple public hearings around the country for the collection of public comment. Public meetings must be held by the replacement agency for DOE in all proposed PI ISF "host communities" -- such as Andrews County, TX; Culberson County, TX; Loving County, TX; and Eddy-Lea Counties/Hobbs, New Mexico. So too must the state capitals of states targeted for PI ISFs, including Austin, TX and Santa Fe, NM, be granted an in-person meeting for public comments. And also the biggest cities in each targeted state, including Dallas/Fort Worth, Houston, etc. in TX, and Albuquerque in NM, be granted public comment meetings. So too must public comment meetings be held in transportation corridor communities across the country.

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 [sic., solutions], and how would the above questions be answered with respect to such approaches?

PI centralized interim storage is illegal under the terms of the Nuclear Waste Policy Act, as Amended. [See the letter <<http://static1.1.sqspcdn.com/static/f/356082/27307046/1477549767997/2016-10-27+Curran+et+al+letter+to+McCree+re+WCS+application.pdf?token=fWH51zHM0D9hsuAwno5S8espVqw%3D>> sent by Diane Curran, legal counsel for an environmental coalition, to the U.S. Nuclear Regulatory Commission; see the coalition's press release <<http://static1.1.sqspcdn.com/static/f/356082/27307338/1477579078047/10+27+16+BN+NIRS+PC+SEED+news+release+FINAL3.pdf?token=UI2WDSYJtvpqVJ08QvOLKjAu6hU%3D>> ; see additional information, including extensive media coverage <<http://www.beyondnuclear.org/radioactive-waste-whatsnew/2016/10/27/despite-setbacks-beyond-nuclear-and-allies-continue-to-chall.html>> .] No alternative approaches rectify this fatal flaw. For this reason alone, DOE should cease and desist from pushing it!

Thank you,

Satya Vayu
Portland, OR