

PrivatelSF

From: Christopher L <ctm_logan@yahoo.com>
Sent: Wednesday, December 21, 2016 5:01 AM
To: PrivatelSF
Subject: Response to RFI on Private Initiatives to Develop Consolidated SNF Storage Facilities
Attachments: Response to DOE on RFI.pdf

To Mr. Andrew Griffith, DOE Office of Nuclear Energy, Greetings!

Please refer to the eight-page PDF I have returned in response to the DOE's Request for Information, concerning "temporary" storage of nuclear waste.

The executive summary can be written in one sentence:

"This plan is a shameful attempt to excuse both government and industry from the vital duty of separating human Life from the lethal radiation of nuclear waste, produced by the nuclear industry at a profit to investors, such that future investors will feel confident to produce yet more of this catastrophic nuclear waste."

I urge you and your fellow public servants at the DOE to take my comments with the utmost seriousness, since nothing less than the continuation of Life on Earth is at stake.

Sincerely,
Christopher Logan

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December 21, 2016

Mr. Andrew Griffith
DOE Office of Nuclear Energy



“Connecticut Yankee” What will this look like in 200 years? And what will it do to what we now call New England? What will be its fate in 2000 years? Will there be humans left in North America, at all, by then? The DOE wants to build *even larger* “temporary” facilities of this kind? ***You cannot safely store nuclear waste for 10,000 years.*** So please, stop fooling around.

<http://www.energy.gov/ne/fuel-cycle-technologies/nuclear-fuels-storage-transportation-planning-project>

“The future of nuclear energy in the United States depends on our ability to manage and disposition used nuclear fuel and high-level radioactive waste.”

These words begin your “Nuclear Fuels Storage and Transportation Planning Project” page. And it’s a good place to stop. Because you cannot “manage and disposition used nuclear fuel and high-level nuclear radioactive waste.” You have no plan to do so, for the immensely long period during which these materials threaten all intelligent Life on this planet. You have “dry casking” which offers at best two centuries of relative sequestration – assuming the facility is not attacked in war or by some terrorist act; that it is not subject to unpredicted flooding, earthquake or other natural disaster; that human error has not misjudged a vital component of the project, in the way that an O-ring scuttled the space shuttle *Challenger*; and that completely unforeseen environmental challenges have no role in the storage project.

What will North America be like in 200 years? Can we be certain that a high level of technology will be available to people, allowing them to re-cask these materials safely, or provide some other form of protection? Is it not much more likely that our civilization – constrained already by declines in mineral output, healthy agricultural land, fish stocks, etc. – would *decline considerably* over the next 200 years? We cannot even fix our highways these days. How are we going to maintain a technology offering even this mediocre level of sequestration for ... 10,000 years?

To moot “interim storage” as though it were merely a phase in a grander, comprehensive plan to “safely store” these catastrophic nuclear materials, is not only bravado, it is *deliberate fraud*. At Avignon, in 2008, a large amount of uranium in solution escaped into the Rhone River. Closer to my home, the Hanford Site is leaking high level waste in the direction of the Columbia River. In Nevada, residual radioactivity from nuclear testing is migrating via groundwater in the direction of California. You, better than I, know how many of these incidents have already occurred. Yet you *dare* to propose “safe storage”?

Transportation of nuclear waste, like the transportation of oil or any other commodity, is likely to involve some accidents. Human error or some unforeseen mischance are likely to derail at least one train, sink at least one ship, flip at least one tractor-trailer. And the results? Permanent irradiation of another area within the United States. Cancer for generations to come.

You’re proposing the transportation of 76,000 metric tons of high-level nuclear waste. (You claim “over 68,000 metric tons” ... whatever.) If only one ton of that cargo goes awry, your project will have the onus of a Fukushima, a Chernobyl. How can you propose such a plan?

Then, there is the interesting aspect of *private enterprise* being used to “safely store” the waste. Gee, do we have any examples of for-profit companies cutting corners? Do they ever go bankrupt and cease operations? Do they ever leave the general public holding the bag for poisoned, played-out mines? Do they ever fail in due diligence on safety matters? Bhopal, for instance, comes to mind. **For how long could we trust a private company to care more about the public health and our common future, than for private profit?** The idea is insane.

Worst of all, you pretend that, having located all of the nation’s high-level nuclear waste at a couple of sites, *some better form of “permanent” storage* will be devised. Yet, as your document “Strategies for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste” (2013) states (pp. 2-3), the DOE is in default of its legal obligations to provide a permanent safe storage of nuclear waste. The reason is simple: no such thing has ever existed, and **your best scientists cannot come up with anything like “safe storage”, especially in the absurd sense of the word “permanent”**.

If a nuclear Bhopal occurs, companies who have profited for decades by generating this waste, and also the government, will be off the hook. In a business sense, the plan is

ingenious. From an ethical point of view – especially coming from a government supposedly responsible to its citizens – *the plan is criminally reprehensible*.

Obviously, “interim storage” is as far as you plan to go. And meanwhile the economy decays, and sea changes in politics and society manifest, which suggest that further vigor to “solve” this problem will not be forthcoming. Yet a government agency responsible to the People of the United States should take the health issues involved very, very seriously. **Nuclear waste is the one problem that could end human Life forever.**

You are attempting to defraud the American people. You are merely *pretending* to “manage and disposition used nuclear fuel,”, so that “the future of nuclear energy” will be assured. For *shame*.

Your department should be focused with the greatest intensity on one nuclear-related project: making nuclear waste benign. Until you have accomplished that task, all others – especially the generation of new waste, but also this absurd proposal for “interim storage” – are conscious and deliberate assaults on the health of Americans, on humans generally, and on the entire biosphere. You have no right to moot such an ill-considered and fraudulent “interim storage” plan. **You should, as ethical human beings who know the damage offered by radioactive materials, be energetically working to halt production, in America and elsewhere, of further radioactive materials.** Meanwhile, you should concentrate the greatest attention and care on the promise you once made: to protect citizens from the radioactive waste already created – *permanently*.

It is with these references to human sanity that I now reply to your:

REQUEST FOR INFORMATION

DOE seeks information on PIs for a consolidated ISF, whether pilot-scale or larger-scale, as an alternative or in addition to federal facilities sited using a consent based siting process. In particular, DOE seeks information in the following areas (all questions do not need to be addressed by prospective respondents):

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?

I have highlighted two words in your question, which demonstrate fallacious assumptions. These assumptions tend to present your plan as reasonable. But in fact, the plan is really no plan at all.

First, there is, at present, **no solution** to the 10,000-year storage of nuclear waste. Since the need is for humans and other Life forms to be perpetually separated from the ionizing effects of this waste (for more than a hundred centuries), no storage mechanism has yet been proposed, that would “solve” this problem. Nuclear materials pose the single most potent threat to continued complex Life on this planet, and yet, as you all know quite well, **no solution has been responsibly mooted** by anyone, despite the fact that “our best scientists” continue to come up with more ways to make *more* nuclear waste and nuclear weapons.

Suggesting that a “solution” is even possible encourages the perpetuation of this Life-destroying technology. I repeat, nuclear materials are not just deadly dangerous on the individual level (the way crocodiles and land mines are) – they are *definitely* deadly to all complex Life on the planet. **Human Life cannot continue in the presence of this waste, which is certain to migrate after the relatively brief period of “storage”.**

Second, the word “interim” suggests that a permanent “solution” will (someday) be found, despite the failure of all plans to date. You can appoint an interim chairman after the death of your former chairman, knowing that normal processes will produce a new chairman. **You cannot expect a “permanent” storage facility to be created, at this point, so you have no business claiming to propose an “interim” storage facility.**

2. How could a PI benefit:

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

It could give large numbers of the population incurable cancers and, in a worst case, kill most of the interesting Life for a vast swath of territory around said community.

b. neighboring communities?

Neighboring communities could similarly benefit. If, for instance, the nuclear waste leaking from Hanford were to reach the Columbia River, there would be a permanent, **large-scale cancer epidemic** spread over the entire Columbia Basin. If a nuclear fire or explosion occurred there, the Willamette Valley and perhaps Seattle and Boise could benefit from the storage, as well.

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?

High-level DOE employees, as well as any federal officials fast-tracking this kind of a plan, should be required to **live within 5 miles of said facility**, raise their kids to drink the tap water there, and frequently visit the site itself, to insure its “safety”. This would

perhaps convince the other residents that the government took their safety seriously. Also, government employees thus situated would be in a good position to monitor any potential leaks or other mischances, such that these would not develop into larger problems. Being officials, they would have the ear of the government, whereas tribal peoples – and the poor of say, the Savannah River region – might not be able to easily raise the attention necessary to mitigate (in whatever way might be possible, if any) a deadly failure, of the project, to work out as advertised.

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?

The inevitable leakage and/or industrial malfunction and/or human error and/or pilferage can be blamed on a company that no longer exists, meaning that *nobody has to pay* compensation or cleanup costs. Very cost effective!

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?

Obviously the company has to take full responsibility (and the government none at all), and yet be absolved in advance of that responsibility by some form of liability waiver. That way **the government is not responsible, and the company is not responsible**. We can see this model in operation around the world, in a variety of industries. Very cost effective! **I'm sure that will be popular with the general public, formerly known as "we, the people"**.

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

At this point I should drop the sarcasm and remind you that you are talking about *business models* – for **an absolutely insane project**. First, you are absolving the power companies who produced the waste of their responsibility to manage it (for 10,000+ years). Second, you are talking about transporting highly dangerous materials from several dozen reactors, across public highways and/or rail lines, through populated areas. I could send pictures of recent train crashes and flipped tractor-trailers, but you should be able to imagine the possible “impact” of such a project. Third, you are pretending that this is some kind of a “solution” – which you call “interim”. Yet it is **no solution at all** to the problem of sequestering large quantities of catastrophic substances from the entire biosphere, for 100 centuries. And the word “interim” is a deliberate lie, because you have no *further* solution after the “interim” solution, and the waste is scheduled to sit in these “interim” facilities while nothing else is done. **There's more interest in making more waste (and money!) than in studying what to actually do with the stuff.**

At some point, long before those 100 centuries are up, the government and culture presently inhabiting this continent will have substantially changed, likely by devolution to a much simpler and less technological arrangement (*if* humans can survive the radiation you're juggling, at all). This is because, nuclear power or not, we're running low on energy inputs, fertile soil, clean water, a number of key metals, and fish, while the population continues to expand.

Can you people imagine (try hard) that *a little volatility* in the surrounding civil society, over the space of 10,000 years, might affect the discrete containment of these catastrophic materials?

Can you imagine that perhaps the concrete and steel used by 21st century civilization to contain these materials might prove inadequate to the task of preventing release into the environment, after a very small fraction of the radioactive lifetimes of these materials?

WHY ARE YOU EVEN CONSIDERING SUCH AN *IDIOTIC PLAN*, and CALLING IT A "*SOLUTION*"?

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

By declaring bankruptcy, having plastic surgery and moving to Brazil.

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

None at all, if **martial law** could be imposed. Short of that, you could refer to the traditional expedients and **pay off a lot of tribal leaders and legislators**, and bring in a slick PR company to do **media campaigns**, convincing working people that they have nothing to worry about and will have more jobs or something. It's been effective in the past, though today people are getting more savvy – and a bit more upset with a government that treats them this way. You can look at North Dakota, for instance.

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

Ha! That *would* be a new one. **Okay, honestly tell people what nuclear waste is.** I mean, a campaign to truly educate people about what it is, what it can do, and how much of it there is, in how many diverse locations. Then, by the same means that Donald Trump and Hillary Clinton got their messages to the people, tell the truth, instead of lies. **Use potent advertising tools to make sure that everyone in America understands the truth about what kind of a scheme you're actually planning, its potent implications, and how insanely inadequate it is in relation to the massive problem, that your department and private industry have already created.** If you really spent some serious time and money educating people about what this *truly means* to them and to their

descendants, I'm sure that your openness and transparency would have valuable results. But the project would surely not go forward, due to massive public outrage.

How can you suggest openness and transparency, and assume that the project could possibly *go forward*? If people knew what you were doing, the project would be shut down immediately. **Not one in a hundred Americans has any idea of what you're doing. Is that "open and transparent"?** If they knew, you could not possibly go forward. *You know that*, and you just want to go forward. So please, cut the crap about "open and transparent".

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

Direct bribery has traditionally been the most effective form of agreement. Whatever you do, don't let all members of the community into the discussion. Sideline any activist groups and hold meetings on short notice, in out-of-the-way locations. Switch the time of the meetings. Then you can deal with one or two "leaders", who can sign away the future of their communities. **Warning: Quite a few Indians are already hip to these techniques, and they may be more formidable than you had expected.**

11. What other considerations should be taken into account?

Oh, I dunno, ... how about **the continuation of human Life on Earth?** How about the health and safety of Americans along the routes designated for transportation of the planet's most deadly substances? How about that 10,000-year timeframe and the absurdity of calling any storage facility a "solution"? What about the culpability of government and industry for the *creation* of this catastrophic material, which is *still being produced* by the same government and industry? What about the eternal responsibility for what is created? Do we just put it in a closet and say, "case closed"? Aren't we forgetting that **a horrible mistake has been made in creating it**, and that this mistake is being **repeated on an ever-greater scale**, to the profit of the companies now being *excused from the downstream consequences*? There are plenty more issues, but you might mull those over for a while and see if you still want to go forward.

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?

How's this for an alternative? You leave nuclear waste where it is, but see that it's dry-casked to the highest standards available. You make that project *the financial and insurance liability of current operators of the plants*, which produced the waste in the

first place. They are not allowed to pass the cost on to energy customers or taxpayers; cask and guarding the waste comes from company profits. This being understood by investors, a “nuclear renaissance” becomes less likely, and therefore less of this problematic waste will be produced.

You calculate the real cost of nuclear power by including the 10,000-year custodial bill.

Then you **stop permitting future nuclear power plants, extending their operation spans and insuring them against disaster.** You reach out in a sense of shame and horror to world bodies and national governments abroad, insisting that nuclear power be phased out ASAP on a global scale. By these actions, though we’re still saddled with **76,000 metric tons of high-level nuclear waste from American commercial plants** alone, *we will not be coping with yet more of it.*

Then put considerable funding into real, long-term solutions to the waste we already have. Don’t rest at “interim” solutions, which may by default remain the only action taken. **Find out how to make radioactive material non-radioactive.** Certainly, if your best scientists, with large-scale funding, cannot find the answer to that key question, you have no business talking about “interim” solutions. **If you cannot solve that basic problem, you certainly should dedicate your best efforts to stopping the creation of more nuclear waste.**

There is no excuse for this naked, fraudulent attempt to excuse power companies and the U. S. government from the solemn duty to protect Americans from lethal radiation produced by the nuclear power industry. The expected result of such a legal expedient would be “safe” investment in nuclear power, because that duty to the public could be disposed of along with the waste. But “disposing” of it is not as easy as disposing of a bloody knife. Nuclear waste persists for centuries, posing an immediate threat to every subsequent generation. To allow power companies to continue the production of this deadly substance, while excusing them from downstream consequences, is ethically despicable.

I ask you in the name of decency, invoking whatever notion you have of divinity or righteousness, to come to your senses as public servants, and reject this entire project as a shameful absurdity.