

**“Consent-Based Siting” of Federal “Consolidated Interim Storage Facilities”  
U.S. Department of Energy Request for Information Public Comment Opportunity**

**Deadline to Submit Public Comments: 5pm ET, Friday, March 4, 2022**

***Sample Comments You Can Use to Write Your Own***

(Comments Can Be Submitted by Individuals, and/or on Behalf of Organizations)

**See HOW to submit your comments, here.**

Also see the sample comments below, bolded and underlined. There, they are followed by further background information that can also be incorporated into comments if you so choose. Sometimes links are provided for even more background information that can also be incorporated. Feel free to use the comments however best helps you write and submit your own comments, including simply copying them verbatim. But here immediately below are ten sample comments, in more concise form:

(1.) **The most serious and inevitable risk if the U.S. Department of Energy were to take ownership of commercial highly radioactive nuclear waste before a permanent geologic repository opens: federal Consolidated Interim Storage Facilities would likely become Consolidated Permanent Surface Storage, that is, de facto Above-Ground Permanent Disposal, or Parking Lot Dumps.**

(2.) **Indefinitely long, to permanent, surface storage at federal CISFs would require active features. Loss of institutional control anytime over the next million years would mean the potential for catastrophic releases of hazardous radioactivity into the environment, which would harm people and other living things downwind, downstream, up the food chain, and down the generations, potentially out to great distances, depending on wind and water driven flow over long periods of time.**

(3.) **Indefinitely long, to permanent, surface storage at federal CISFs would remain dangerously accessible, risking unintentional/accidental, but nonetheless catastrophic, releases of hazardous ionizing radioactivity, as due to container degradation/failure over time, extreme weather disasters due to climate chaos, etc. However, intentional releases, as due to an act of war, terrorist attack, or sabotage, are also possible. So too is theft/diversion of weapons-usable materials, risking proliferation of nuclear weaponry or radiological dirty bombs.**

(4.) **Indefinitely long, to permanent, surface storage at federal CISFs would achieve only very short-term effectiveness, at best, compared to the hazardous persistence of irradiated nuclear fuel and highly radioactive waste.**

(5.) **Indefinitely long, to permanent, surface storage at federal CISFs, would result in intergenerational inequity, a form of environmental injustice.**

(6.) Any legal authority for DOE to take title to and liability for commercial irradiated nuclear fuel at a federal CISF, in the absence of a permanent geologic repository, was very limited as to the quantity that could be stored there, was for emergency purposes only, and expired more than three decades ago.

(7.) Federal CISFs would multiply the highly radioactive waste transportation risks, while accomplishing no increase whatsoever in the safety, security, health, or environmental protection associated with its storage.

(8.) Nuclear power should be phased out and abolished, so that no more highly radioactive waste will be generated. We need to stop making it in the first place. However for highly radioactive irradiated nuclear fuel (INF) that already exists, hardened on-site storage (HOSS), or hardened near-site storage, is the best interim measure, not CISFs. HOSS, or hardened near-site storage, is the preferred interim alternative, not CISFs.

(9.) The continued targeting of CISFs at BIPOC (Black, Indigenous, People of Color) and/or low-income communities, already disproportionately burdened by pollution and hazardous facilities, is a violation of environmental justice principles. DOE, which itself has an infamous history of targeting Native American reservations for CISFs (previously called by other names, such as Monitored Retrievable Storage (MRS) sites, Independent Spent Fuel Storage Installations (ISFSIs), Away From Reactor (AFR) sites, etc.), must cease and desist from such environmentally/radioactively racist practices.

(10.) Federal CISFs would be a dangerous dead-end detour on the road to a scientifically/ technically, and socially acceptable, repository. Federal CISFs would also constitute a radical reversal of long established U.S. policy, law, regulation, and court precedent, which has held the private owners of commercial irradiated nuclear fuel responsible for its interim storage, while the federal government (that is DOE, using both nuclear ratepayer and federal taxpayer funds) is responsible for permanent disposal.

**Same sample comments as listed above, but followed by further background information and links that can also provide additional/more detailed ideas for including in your own comments to be submitted:**

**(1.) The most serious and inevitable risk if the U.S. Department of Energy were to take ownership of commercial highly radioactive nuclear waste before a permanent geologic repository opens: federal Consolidated Interim Storage Facilities would likely become Consolidated Permanent Surface Storage, that is, de facto Above-Ground Permanent Disposal, or Parking Lot Dumps**

To ensure that highly radioactive commercial nuclear waste eventually gets to a suitable, socially acceptable, permanent deep geologic repository, the U.S. federal government must have a comprehensive strategy that keeps the U.S. on the road to a repository and precludes premature and false “quick-fixes.” If the federal government undertakes consolidated irradiated nuclear fuel interim storage before it knows the location and characteristics of a proposed repository, it may not have the resources or political will for long-term logistical and financial planning and execution. Given the high costs of packaging and transportation necessary for consolidated interim storage, money may run out before the significant additional expense of permanent repository construction and operation is undertaken. In those circumstances, highly radioactive commercial and federal nuclear waste will become stranded at surface storage facilities.

**(2.) Indefinitely long, to permanent, surface storage at federal CISFs would require active features. Loss of institutional control anytime over the next million years would mean the potential for catastrophic releases of hazardous radioactivity into the environment, which would harm people and other living things downwind, downstream, up the food chain, and down the generations, potentially out to great distances, depending on wind and water driven flow over long periods of time.**

Highly radioactive nuclear waste storage would be in casks placed at the earth’s surface or slightly below (i.e., within tens of meters). Storage systems would rely entirely on human-made engineered barriers that must be maintained and replaced at least every 100 years. This includes not only systems, structures, and components, including personnel, dedicated to safety, health, and environmental protection, but also to security. Therefore, surface storage requires investment and maintenance, governmental stability, and oversight for as long as the hazard persists (i.e., a million years).

By contrast, deep geologic disposal at a scientifically suitable and socially acceptable permanent repository, meeting all required stringent criteria, would rely on passive features: highly radioactive waste disposal casks would be placed in a mined repository 250-1,000 meters below the earth’s surface. The disposal system would rely on a combination of human-made and natural geologic barriers designed to last a million years without need for human maintenance.

**(3.) Indefinitely long, to permanent, surface storage at federal CISFs would remain dangerously accessible, risking unintentional/accidental, but nonetheless catastrophic, releases of hazardous ionizing radioactivity, as due to container degradation/failure over time, extreme weather disasters due to climate chaos, etc. However, intentional releases, as**

**due to an act of war, terrorist attack, or sabotage, are also possible. So too is theft/diversion of weapons-usable materials, risking proliferation of nuclear weaponry or radiological dirty bombs.**

The location of CISFs at or near the earth's surface would permit inadvertent or intentional intrusion into containers after emplacement. Surface or near-surface federal CISF location would make nuclear waste more accessible and therefore more vulnerable to theft, re-use, or accidental exposure and release. This would include not only its vulnerability to container degradation and failure, but also to such unpredictable, but likely over long enough time periods, risks as extreme weather disasters due to climate chaos, terrorist attacks, acts of warfare, or other potentially catastrophic scenarios resulting in large-scale release of hazardous ionizing radioactivity.

By contrast, deep geologic disposal at a permanent repository that meets all stringent scientific/technical and social acceptance requirements would make highly radioactive wastes inaccessible by design, getting the wastes away from the volatile surface of the planet. The wastes' location in a deep mined geologic repository would make access to the hazardous materials extremely difficult. Therefore, this waste would have a low probability of theft, re-use, leakage, or accidental exposure and release.

**(4.) Indefinitely long, to permanent, surface storage at federal CISFs would achieve only very short-term effectiveness, at best, compared to the hazardous persistence of irradiated nuclear fuel and highly radioactive waste.**

NRC, for example, licenses storage casks for renewable 40-year terms and assumes that casks will be replaced "approximately once every 100 years." In fact, in its 2014 Continued Storage of Spent Nuclear Fuel GEIS and Rule, NRC assumes that the entirety of CIS would have to be replaced at least once per century, including not only the containers, but all systems, structures, and components associated with the facilities.

By contrast, deep geologic disposal at a permanent repository that meets stringent criteria would achieve long-term isolation. Federal regulatory standards require a repository to provide effective isolation of highly radioactive nuclear waste out to a million years, without requiring any human intervention.

**(5.) Indefinitely long, to permanent, surface storage at federal CISFs, would result in intergenerational inequity, a form of environmental injustice.**

Burdens would fall on future generations with the responsibility, costs, liabilities, and risks of maintaining protective barriers against exposure to radioactive toxins, even though they never enjoyed one watt-hour of electricity generated by the irradiation of reactor fuel. The surface location would provide relatively ineffective long-term protection against theft or diversion of Plutonium-239, risking nuclear weapons proliferation. Similarly, highly radioactive and long-lasting hazardous wastes could be stolen or diverted for use in radiological “dirty bombs,” even a small quantity of which could unleash catastrophic consequences if detonated with conventional explosives or others dispersed into the environment, as in an urban population center, agricultural breadbasket, or near a major drinking water supply.

By contrast, deep geologic disposal at a permanent repository meeting stringent requirements would live up to intergenerational equity principles. The repository would be designed to protect future generations who did not benefit from the nuclear reactors that generated the nuclear waste. Ideally leakage would be prevented until the long-lasting waste decays significantly. Costs would be paid primarily by nuclear reactor licensees (more precisely, through fees charges to their ratepayer) through the Nuclear Waste Fund, collected during years of reactor operation. A scientifically suitable, socially acceptable deep geological repository could also provide maximum protection against theft or diversion of Plutonium-239 for production of nuclear weapons.

(Per the five points above, for more detailed information on the advantages of socially acceptable, environmentally just, and scientifically and technically suitable permanent geologic repository disposal, versus permanent surface storage at consolidated “interim” storage facilities, see the Beyond Nuclear fact sheet *Maximizing Health and Environmental Protection: Permanent Geologic Disposal versus Surface Storage of Nuclear Waste*. See also Beyond Nuclear’s “Stringent Criteria for Siting Permanent Geological Repository,” for the technical/scientific, as well as social/environmental justice and consent-based siting requirements that should be strictly required.

Note that we have been warning about the risks that CISFs would likely become de facto permanent surface storage, or parking lot dumps, for many years. See, for example, our comments to DOE in Jan. 2017.)

**(6.) Any legal authority for DOE to take title to and liability for commercial irradiated nuclear fuel at a federal CISF, in the absence of a permanent geologic repository, was very limited as to the quantity that could be stored there, was for emergency purposes only, and expired more than three decades ago.**

The only provision in the Nuclear Waste Policy Act of 1982, as Amended, that allows transfer of title to irradiated nuclear fuel, from commercial licensees to DOE, prior to the opening of a permanent geologic disposal repository, is the emergency “Interim Storage Program” found in Subtitle B of the NWPA. But the Interim Storage Program expired in 1990. 42 U.S.C. (Part) 10156(a)(1). Thus the NWPA contains no current provision that would allow DOE to assume title and responsibility for commercial irradiated nuclear fuel to be stored at CISFs, whether federal or private. For more information, see the October 26, 2016 letter from an environmental coalition to the Commissioners of the U.S. Nuclear Regulatory Commission, re: SUBJECT: WCS License Application for Spent Fuel Storage Facility in Andrews County, TX, Docket No. 72-1050.

That is, DOE has no legal authority to proceed with the construction and operation of federal CISFs, unless and until a permanent geologic disposal repository is licensed, constructed, and operating.

Likewise, federal ownership of commercial highly radioactive nuclear waste at private consolidated ‘interim’ storage sites is illegal under the Nuclear Waste Policy Act of 1982, as Amended. Yet the private, commercial nuclear power industry is asking federal regulators to help them evade federal law by issuing private CISF construction and operating licenses that contemplate illegal federal ownership of the commercial irradiated nuclear fuel at two proposed private consolidated interim storage facilities, Interim Storage Partners, LLC’s at Waste Control Specialists, LLC’s national “low” level radioactive waste dump immediately upon the New Mexico border in Andrews County, Texas, and at Holtec International’s at the Eddy-Lea [Counties] Energy Alliance’s site in southeastern New Mexico, midway between Hobbs and Carlsbad, just 40-some miles from ISP. These illicit and illegal licensing actions are now on appeal in federal court. [Beyond Nuclear, et al. v. NRC (U.S. Court of Appeals for the D.C. Circuit, Nos. 20-1187, 20-1225, 21-1104, 21-1147 (consolidated)) (proposed ISP facility in western Texas); Don’t Waste Michigan, et al. v. NRC (U.S. Court of Appeals for the D.C. Circuit, Nos. 21-1048, 21-1055, 21-1056, 21-1179 (consolidated)) (proposed Holtec facility in southeastern New Mexico). Additional federal appeals have been filed by the States of Texas (in the 5th Circuit Court) and New Mexico (in federal district court there, as well as in the 10th Circuit Court). Fasken Land and Minerals, Inc. and the Permian Basin Land and Royalty Owners Association has joined the State of Texas in the 5th Circuit Court of Appeals.]

**(7.) Federal CISFs would multiply the highly radioactive waste transportation risks, while accomplishing no increase whatsoever in the safety, security, health, or environmental protection associated with its storage.**

Since federal CISFs are supposedly “interim” (although they risk becoming de facto permanent), this means the highly radioactive wastes would have to shipped all over again, this time to a

permanent repository. That repository could very well turn out to be right back in the same direction from which the wastes originated in the first place. Take shipments from Maine Yankee to the private CISFs currently targeted at the already heavily polluted, Latinx majority New Mexico/Texas borderlands. The distance from Maine Yankee nuclear power plant site to Holtec's CISF in NM is around 2,500 miles, to ISP's in TX just some tens of miles less. Maine has been targeted for a permanent geologic repository, under Sebago Lake, during the "Eastern Site Search" launched by the Nuclear Waste Policy Act of 1982, as Amended. It could be targeted again in the future, as documented in the DOE's 2008 "Report on the Need for a Second Repository." If the Maine repository went ahead, the irradiated nuclear fuel shipped to the Permian Basin would then have to return, another 2,500 miles, right back to where it came from in the first place. That's 60 containers of highly radioactive waste, traveling 5,000 miles round-trip, through a dozen or more states, for no good reason whatsoever. Similar non-sensical, high risk round-trips could occur all across the country. CISFs, whether private or federal, make no sense and are not needed. Given the transportation risks of Mobile Chernobyls (by road and/or rail), Floating Fukushimas (by barge), Dirty Bombs on Wheels (any and all shipment modes), and Mobile X-ray Machines That Can't Be Turned Off (any and all modes, even during "routine" or "incident-free" shipments, although externally contaminated shipping containers would make gamma and neutron radiation doses to transport sector workers and innocent public passersby all the worse), there should only be one shipment, not multiple shipments. That is, containers of highly radioactive waste should travel from where they were generated, to a scientifically suitable, socially acceptable permanent geologic repository. That is, shipments should occur once, to minimize transport risks. CISFs, whether federal or private, would multiply transport risks unnecessarily.

**(8). Nuclear power should be phased out and abolished, so that no more highly radioactive waste will be generated. We need to stop making it in the first place. However for highly radioactive irradiated nuclear fuel (INF) that already exists, hardened on-site storage (HOSS), or hardened near-site storage, is the best interim measure, not CISFs. HOSS, or hardened near-site storage, is the preferred interim alternative, not CISFs.**

Irradiated nuclear fuel should be transferred out of wet indoor storage pools in an expedited fashion, into hardened on-site dry cask storage, in order to address the catastrophic risks of potential pool fires. After the interim period of HOSS, only then should a single away-from-reactor transport shipment take place, to a socially acceptable, environmentally just, free and fully informed consent-based siting permanent geologic repository, to minimize the inevitable, high transport risks.

For more information, see:

Principles for Safeguarding High-Level Radioactive Waste at Reactors (Hardened On-Site Storage, HOSS), endorsed by more than 200 organizations, representing all 50 states;

Executive Summary, and [Full report of “Robust Storage of Spent Nuclear Fuel: A Neglected Issue of Homeland Security”](#), by Dr. Gordon Thompson of Institute for Resource and Security Studies (January 2003), focusing on the vulnerability of irradiated fuel stored at the nation’s nuclear power stations to terrorism and other risks, and what can be done about it;

Beyond Nuclear Letter to the Editor of the Los Angeles Times, re: hardened near-site storage at San Onofre nuclear power plant;

Beyond Nuclear’s *Stringent Criteria for a Highly Radioactive Waste Geologic Repository*;

Beyond Nuclear’s *Licensing Now Underway for Two Unlawful Consolidated ‘Interim’ Storage Nuclear Waste Facilities: New Mexico and Texas/What Measures Are Needed for Reasonably Safe Interim Storage at Reactor Sites Pending Repository Siting and Licensing?*)

**(9.) The continued targeting of CISFs at BIPOC (Black, Indigenous, People of Color) and/or low-income communities, already disproportionately burdened by pollution and hazardous facilities, is a violation of environmental justice principles. DOE, which itself has an infamous history of targeting Native American reservations for CISFs (previously called by other names, such as Monitored Retrievable Storage (MRS) sites, Independent Spent Fuel Storage Installations (ISFSIs), Away From Reactor (AFR) sites, etc.), must cease and desist from such environmentally/radioactively racist practices.**

This is especially true, in light of President Obama’s proclamation, in March 2009, honoring Sauk and Fox/Pokagon Potawatomi environmental justice and anti-nuclear activist Grace Thorpe for her work against CISFs targeting Native American reservations, including her own in Oklahoma.

This includes the dynamic that has occurred more than once in the past, in which federal CISF schemes have transformed into private CISF schemes. Both the DOE Nuclear Waste Negotiator initiated CISF schemes at the Mescalero Apache Reservation in southern New Mexico, as well as at the Skull Valley Goshutes Reservation in western Utah, were eventually turned into private CISF schemes by Private Fuel Storage, LLC, a consortium of nuclear utilities with Holtec International as the container supplier. In fact, the PFS CISF at Skull Valley Goshutes was, and still is, licensed by NRC. However, it has never been constructed nor operated.

**(10.) Federal CISFs would be a dangerous dead-end detour on the road to a scientifically/technically, and socially acceptable, repository. Federal CISFs would also constitute a radical reversal of long established U.S. policy, law, regulation, and court precedent, which**



**has held the private owners of commercial irradiated nuclear fuel responsible for its interim storage, while the federal government (that is DOE, using both nuclear ratepayer and federal taxpayer funds) is responsible for permanent disposal.**

As the U.S. Nuclear Regulatory Commission has recognized, by providing, in the Nuclear Waste Policy Act of 1982, as Amended, Interim Storage Program, a narrow time period (the years 1982 to 1990) when DOE could take title to commercial irradiated nuclear fuel prior to the opening of a repository, “Congress intended to force the utilities to solve their own interim storage solutions after the federal program had ‘bought them time’ to do so.” Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 405-06 (2002). This resolve to force licensees to solve their own problems was based on “Congress’s belief that interim storage was the generators’ responsibility.” *Id.* at 404.

Congressional intent to place responsibility for interim commercial irradiated nuclear fuel storage squarely on licensees also is reflected in the other, extremely narrow, provisions of the Interim Storage Program. For instance, the Interim Storage Program limited the amount of commercial irradiated nuclear fuel that could be transferred to the DOE to only 1,900 metric tons. 42 U.S.C., Parts 10151(b)(2), 10155(a)(1). And before transferring that stopgap quantity of commercial irradiated nuclear fuel to the DOE, a reactor licensee was required to persuade the NRC that a lack of adequate irradiated nuclear fuel storage capacity at an operating nuclear reactor would jeopardize “the continued, orderly operation” of the reactor. 42 U.S.C., Part 10151(a)(3). These provisions show that Congress intended, prior to the opening of a repository, to sharply restrict the time and circumstances under which the DOE could take title to commercial irradiated nuclear fuel. (Taken from October 26, 2016 environmental coalition letter to NRC, re: WCS License Application, page 3 of 5.)

The federal government’s liability for permanent disposal in a geologic repository is a unique and unprecedented subsidy in all of industry, easily surpassing \$100 billion in value to the nuclear power industry, at the public’s expense. Several years ago, DOE estimated that the price tag for the proposed repository at the scientifically unsuitable, illegal, and socially unacceptable Yucca Mountain, Nevada site, on Western Shoshone land would be close to \$100 billion, accounting for licensing, construction, and two centuries of operation. Simply adjusting for inflation alone would bring that grand total to over \$100 billion in today’s dollar figures. Thus, repositories meeting stringent criteria — all of which Yucca Mountain violates — could easily cost \$100 billion, or more, as well. DOE — or more appropriately, the replacement agency DOE’s own Blue Ribbon Commission on America’s Nuclear Future recommended take over highly radioactive waste management — would have access to more than \$40 billion in the Nuclear Waste Fund, collected as a fee from nuclear electricity ratepayers from the 1980s to 2013. The shortfall, more than \$60 billion, would come from federal taxpayers.

The shift of focus to the false quick-fix of federal CISFs would end momentum needed to locate a site meeting stringent criteria for a deep geologic repository for permanent disposal, and would waste critical time, money, and energy on the non-solution of CISFs. Given the cost and complexity of siting, licensing, constructing, and operating a permanent repository, such significant waste of resources on federal CISFs could well mean that money and momentum (societal and political will) would run out. This would result in the stranding of highly radioactive wastes at the CISFs, meaning they would become catastrophically risky *de facto* permanent surface storage, surface disposal, parking lot dumps (see point #1, above).

Federal CISFs would involve the expenditure of federal taxpayer money, for interim storage. U.S. policy, law, regulation, and court precedent has long held that interim storage costs are the responsibility of the private nuclear power industry title holders to the commercial irradiated nuclear fuel. Federal CISFs would shift such interim storage costs onto federal taxpayers. This would be in addition to the \$2.2 million per day (\$800 million per year) federal taxpayers are already paying, in the form of damages, from the Judgment Fund at the U.S. Treasury, to commercial irradiated nuclear fuel title holders, due to DOE's partial breach of contract with them. DOE had contracted to begin permanent disposal at a repository beginning on January 31, 1998, but has missed that deadline by a quarter-century. DOE has also admitted a repository very likely will not open in this country until 2048 at the earliest. This means another quarter-century to come of the U.S. Judgment Fund hemorrhaging taxpayer dollars totaling tens of billions of dollars, for decades to come.

As the U.S. Nuclear Regulatory Commission has recognized, by providing, in the Nuclear Waste Policy Act of 1982, as Amended, Interim Storage Program, a narrow time period (the years 1982 to 1990) when DOE could take title to commercial irradiated nuclear fuel prior to the opening of a repository, "Congress intended to force the utilities to solve their own interim storage solutions after the federal program had 'bought them time' to do so." Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-29, 56 NRC 390, 405-06 (2002). This resolve to force licensees to solve their own problems was based on "Congress's belief that interim storage was the generators' responsibility." *Id.* at 404.

Congressional intent to place responsibility for interim commercial irradiated nuclear fuel storage squarely on licensees also is reflected in the other, extremely narrow, provisions of the Interim Storage Program. For instance, the Interim Storage Program limited the amount of commercial irradiated nuclear fuel that could be transferred to the DOE to only 1,900 metric tons. 42 U.S.C., Parts 10151(b)(2), 10155(a)(1). And before transferring that stopgap quantity of commercial irradiated nuclear fuel to the DOE, a reactor licensee was required to persuade the NRC that a lack of adequate irradiated nuclear fuel storage capacity at an operating nuclear reactor would jeopardize "the continued, orderly operation" of the reactor. 42 U.S.C., Part 10151(a)(3). These provisions show that Congress intended, prior to the opening of a repository,

to sharply restrict the time and circumstances under which the DOE could take title to commercial irradiated nuclear fuel. (Taken from October 26, 2016 environmental coalition letter to NRC, re: WCS License Application, page 3 of 5.)

(Prepared by Kevin Kamps, radioactive waste specialist at Beyond Nuclear, on February 2, 2022. For further information or with questions, contact [kevin@beyondnuclear.org](mailto:kevin@beyondnuclear.org), or (240) 462-3216. Also see: <http://archive.beyondnuclear.org/centralized-storage/>)