



Policy Resolution 2018-10

Transportation, Storage and Disposal of Radioactive Waste, Radioactive Materials and Spent Nuclear Fuel

A. BACKGROUND

1. Large amounts of radioactive waste have been, and will continue to be, transported through western states, both as a result of environmental cleanup of federal sites involved in the development and manufacture of nuclear weapons and for storage or disposal of spent nuclear fuel (SNF) used to generate electricity.
2. The Waste Isolation Pilot Plant (WIPP) located in New Mexico was constructed to serve as a permanent repository for defense-related transuranic (TRU) waste. On March 26, 1999, WIPP received its first truck shipment of TRU waste from the Los Alamos National Laboratory.
3. Since that date, the WIPP shipping campaign has demonstrated the safe transportation of TRU waste. Approximately 11,175 shipments of contact-handled (CH) waste and 719 shipments of remote-handled (RH) waste have been received at the WIPP facility as of October 26, 2015. During that time, only a few minor incidents have occurred while shipments were en route. None of these incidents resulted in serious injury or a release of radioactive material into the environment.
4. More than 90 percent of the existing inventory of TRU waste is located at Department of Energy (DOE) facilities in western states. Tens of thousands of cubic meters of TRU waste – some mixed with hazardous chemical waste – await permanent disposal at WIPP.
5. The success of the WIPP TRU waste transportation campaign is directly attributable to a collaborative partnership and planning effort between DOE and the western states to develop and implement the Western Governors' Association (WGA) WIPP Transportation Safety Program.¹
6. The 2006 National Academy of Sciences National Research Council report, "Going the Distance?: The Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States," provides a comprehensive set of findings and recommendations that provide a sound basis for planning future SNF and high-level radioactive waste (HLW) shipping campaigns.
7. Currently, about 75,000 metric tons of SNF is stored at or near nuclear power plant sites, research and test reactors, and independent spent fuel storage installations in 40 states. Historically, more than 80 percent of the SNF at operating and shut down reactor sites has been generated east of the 100th meridian.

¹ As of June 30, 2021, responsibility for the operation and maintenance of the WGA WIPP Transportation Safety Program was transferred to the Western Interstate Energy Board.

8. The amount of SNF stored on-site at commercial nuclear reactors will continue to accumulate – increasing by about 2,000 metric tons per year and likely almost doubling to about 140,000 metric tons before it can be moved off-site, because storage or disposal facilities may take decades to develop.
9. Congress mandated that the federal government begin accepting spent fuel by January 30, 1998. However, it remains uncertain when an operating repository will be sited, let alone begin accepting waste.
10. High-level radioactive wastes that are the by-products of nuclear weapons production and used fuel from the U.S. Navy’s nuclear power activities will require permanent disposal. There are also quantities of weapons-capable plutonium and highly enriched uranium that the federal government has declared surplus to national security needs, which will likewise require disposal in a repository. Many of these wastes are being temporarily stored at locations in western states, including California, Idaho, New Mexico and Washington.
11. The Western Interstate Energy Board (WIEB) provides most Western Governors with the instruments and framework for cooperative state efforts to “enhance the economy of the West and contribute to the well-being of the region’s people.” WIEB’s High-Level Radioactive Waste Committee, which consists of nuclear waste transportation experts from state energy, public safety, and environmental agencies, has been working with DOE since the 1980s to develop a safe and publicly acceptable system for transporting SNF and HLW under the Nuclear Waste Policy Act of 1982 (Pub. L. 97-425 as amended, 42 U.S.C. 10101 et seq.).
12. Given existing and proposed sites for disposal of radioactive waste in the United States, Western Governors are concerned that western states may be disproportionately impacted by radioactive waste transportation and disposal activities.

B. GOVERNORS’ POLICY STATEMENT

1. Western Governors believe that the safe and event-free transport must be paramount in all federal policies regarding transportation of radioactive materials and SNF. This is true of all transportation modes, including truck and railway.
2. The Governors support existing federal radioactive waste transport safety requirements designed to protect public health and safety, including the Hazardous Materials Transportation Authorization Act.
3. Early coordination and effective communication with state, tribal and local governments are essential to the ultimate success of any nuclear waste transportation safety program.
4. The WIPP Transportation Safety Program Implementation Guide is an excellent model for transportation planning, and a similar guide should be used as a base document for DOE transportation programs including shipments of SNF, or HLW, to any storage and/or disposal facility.
5. If DOE decides to transport radioactive materials or waste – such as SNF, HLW or TRU – by rail, the federal agencies, working with states to design a transportation system, should receive full commitment and cooperation from the rail industry in implementing best

practice transport. Congress or DOE may need to explicitly address this need, in order to provide a firm basis for transportation system design.

6. The WGA WIPP Transportation Safety Program is essential to the expeditious cleanup and disposal of TRU waste from the U.S. nuclear weapons complex and the operation of WIPP. Western Governors expect DOE to fulfill commitments made by the Secretary of Energy as set forth in Memorandums of Agreement with WGA signed in 1995, 2003 and 2009.²
7. DOE must continue to comply with both the letter and spirit of all applicable requirements specified in the WIPP Land Withdrawal Act (Pub. L. 102-579, as amended by Pub. L. 104-201, 106 Stat. 4777 et seq.), especially in regard to transportation safety, emergency preparedness and accident prevention.
8. The Governors also expect DOE to follow the safety standards, principles and procedures as contained in the WIPP Transportation Safety Program Implementation Guide, as amended, for the transport of all TRU waste, whether to WIPP or to an interim site for storage, characterization and/or repackaging.
9. DOE must continue to provide sufficient and timely in-kind, financial, technical and other appropriate assistance to any state or Indian tribe through whose jurisdiction TRU waste will be transported for the purpose of planning, developing and implementing the WGA WIPP Transportation Safety Program.³
10. The Governors believe it is the responsibility of the generators of SNF and HLW and the federal government, not the states and tribes, to pay for all costs associated with assuring safe transportation, responding effectively to accidents and emergencies that may occur, and otherwise assuring public health and safety. This includes costs associated with route evaluations and inspecting and escorting shipments. In addition, funding allocations to states and tribes should be made on a needs-based rather than formula-based system.
11. In any radiological materials/waste shipping campaign, including SNF or HLW, no federal agency or other entity should have the authority to privatize or delegate to a contractor any key transportation responsibilities unless approved by the states. Such responsibilities include but are not limited to: interacting with states, tribes, and affected units of local government; selection of transportation modes, routes, and casks; preparation of an environmental impact statement that addresses transportation issues; preparation of transportation plans in concurrence with states and tribes; and decisions regarding the provision of technical assistance and funding to the states in preparation for shipments.
12. Trains transporting SNF and HLW should be inspected by fully qualified inspectors, using a consistent approach which has been developed cooperatively with the help of western states. To the extent practical, the inspection protocol should be commensurate with the Commercial Vehicle Safety Alliance Level VI inspection program, which has been successfully used by all highway shipments to WIPP.

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13. The Federal Railroad Administration Rail Safety Program and revised Safety Compliance Oversight Plan should be fully implemented along any route affected by prospective SNF/HLW shipments in any western state. Five years prior to the start of such shipments, each affected western state should receive financial and technical support from DOE to ensure sufficient trained state rail safety inspectors.
14. Although DOE has the authority to self-regulate its shipments of SNF and HLW, the Governors believe DOE should adopt the U.S. Nuclear Regulatory (NRC) physical protection requirements for all such shipments. NRC regulations establish a comprehensive physical protection system designed both to minimize the potential for theft, diversion, or radiological sabotage of such shipments, and to facilitate the location and recovery of such shipments that may have come under the control of unauthorized persons.
15. DOE should invoke provisions of its Standard Contract with nuclear utilities to prioritize shut-down nuclear reactors over operating reactors in terms of shipment priority. In addition, DOE should adopt a policy of shipping "oldest fuel first," so as to reduce the radiological risk during transportation.
16. In the event that centralized interim storage, either private or federal, is deemed necessary, no such facility, whether publicly or privately owned, shall be located within the geographic boundaries of a western state or U.S. territory without the written consent of the Governor in whose state or territory the facility is to be located.
17. Any proposal to store or otherwise dispose of HLW and/or SNF must be viewed as being part of an integrated program that considers all aspects of necessary operation and intergovernmental considerations. Specifically, transportation and logistical considerations such as proximity to population centers or military installations should not be an afterthought to the planning or siting process.
18. The Governors support efforts by the federal government to examine alternative waste acceptance options, including but not limited to providing funds to utilities for expanded on-site storage and taking title to SNF at individual reactor sites. The search for alternatives must not detract from the imperative to develop a permanent solution to the management and disposition of SNF.
19. The Governors strongly encourage DOE and NRC to work cooperatively with the states in implementing a policy to ensure the safe management, transportation, storage, and disposal of SNF and HLW and to comply with any and all agreements negotiated and entered into by a state's Governor regarding these matters.
20. Commercial SNF should remain at reactor sites until:
 - One or more storage and/or disposal sites or reprocessing facilities are operational.
 - DOE and the nuclear utility companies have consulted with states along the waste transportation corridor and implemented a mutually acceptable transportation plan for shipping the SNF waste to interim storage facilities or permanent disposal sites.
 - DOE and the nuclear utility companies have put into place adequate infrastructure capacity to handle, store and dispose of this waste.

- DOE, the U.S. Department of Transportation and the nuclear utility companies have ensured and funded adequate state and local emergency and medical responder training and resources in case of an accident or terrorist attack while shipping this waste.
21. The creation of interim storage sites for SNF would be a direct result of the federal government's failure to begin accepting spent fuel on schedule. Therefore, the Governors maintain that it is the federal government's responsibility to ensure adequate preparation for shipments to these facilities, coordination with states, and provision of adequate federal funding, to reimburse the states for costs associated with shipments to any interim storage facility, whether publicly or privately owned. The Governors consider it to be entirely appropriate to use the Nuclear Waste Fund to pay for these activities.

C. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct WGA staff to work with Congressional committees of jurisdiction, the Executive Branch, and other entities, where appropriate, to achieve the objectives of this resolution.
2. Furthermore, the Governors direct WGA staff to consult with the Staff Advisory Council regarding its efforts to realize the objectives of this resolution and to keep the Governors apprised of its progress in this regard.

This resolution will expire in June 2022. Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult www.westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.