

SHOULD THE U.S. WAIT TO CONSOLIDATE?

RECENT LEGAL DEVELOPMENTS REGARDING THE INTERIM STORAGE OF NUCLEAR WASTE*

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Why the study was needed

Storing nuclear waste is essential to nuclear energy production. Commercial nuclear power plants generate high-level, radioactive waste composed of “spent” uranium or plutonium fuel no longer capable of efficiently producing electricity. This waste is known as spent nuclear fuel (SNF). SNF poses significant technical, regulatory, and political challenges for its safe storage. The current challenge, however, is that neither Consolidated Interim Storage Facilities (CISFs), nor a permanent repository exists in the U.S., so nuclear power plants must indefinitely store SNF onsite. Furthermore, the Supreme Court recently accepted review of a case that calls into question the Nuclear Regulatory Commission’s (NRC’s) authority to license CISFs at all.

About the study

Recognizing that the United States has historically struggled with the issue of storing nuclear waste, this article provides a status update and legal analysis on the presently evolving federal laws and regulations governing the interim storage of nuclear waste.

The article begins with the historical and political context surrounding SNF waste management and a permanent storage solution, then provides more information about CISFs and the associated NRC licensing procedure, analyzes state laws and policies regarding the interim storage of SNF, compares the NRC’s and the opposing interpretations of the relevant statutory provisions that either authorize or deny the NRC’s ability to license private, away-from-reactor CISFs. Finally, the article concludes by discussing the potential impacts of a Supreme Court decision that limits the NRC’s authority to license these types of interim storage facilities and the associated downstream effects on developing new nuclear power projects.



What the author concluded

The author concludes that if the Supreme Court finds the relevant statutory provisions that do not permit the licensing of any offsite interim storage facility in the absence of a federal repository, all efforts to construct consolidated facilities would cease. This would render moot state efforts to explore CISFs until the U.S. develops a permanent repository or the law is amended to explicitly allow the NRC to license CISFs. However, even if the Court finds that the NRC has the authority to license private CISFs, in the absence of a consent-based process, the construction and operation of those facilities is still not assured.

In the face of growing demand for nuclear power and novel advancements in nuclear technology, action is therefore necessary to promote both ongoing reactor operations and nuclear technology advancements.



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Citation:

Forrest, Scarlett, “Should the U.S. Wait to Consolidate? Recent Legal Developments Regarding the Interim Storage of Nuclear Waste,” *Oil, Gas & Energy Resources Law -- Section Report*, Volume 49, Number 1 (Winter 2025).

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