


Understanding DOE's Critical Decision Process

Progress Toward a Consolidated
Interim Storage Facility for
Commercial Spent Nuclear Fuel



Critical decision (CD)-0 was recently approved for Department of Energy's (DOE's) Consolidated Interim Storage Facility project. Learn more about this milestone.

The CD process* is used by DOE to manage the Department's large-scale, long-term projects, also known as capital projects.

DOE is implementing a consent-based siting process to site one or more federal consolidated interim storage facilities for commercial spent nuclear fuel, which is considered a "major system project," requiring internal CD process review. The CD process accounts for internal DOE project management, concurrent to the Department's consent-based siting approach, which will ensure the participation of communities, State and local governments, Tribal Nations, and other interested parties.

DOE's CD process ensures that a project:

-  **Finishes on time**
-  **Meets mission performance requirements**
-  **Finishes within budget**
-  **Meets safeguards and security requirements**
-  **Meets environmental, safety, and health requirements**

**Learn more
about the
consent-based
siting process**



*DOE Order 413.3B, "Program and Project Management for the Acquisition of Capital Assets" governs the execution of capital asset projects and provides the steps needed to build a facility to meet a DOE mission need. <https://www.directives.doe.gov/directives-documents/400-series/0413.3-B0order-B-chg7-ltdchg/@images/file>

What are the Five Critical Decisions?

The CD process ensures stringent review and approval by the Deputy Secretary of Energy for each step in the project. The CD process outlines five milestones that each represent a critical phase in the project's lifecycle.



Approve Mission Need – This initial decision confirms there is a need for the project that cannot be met through other means.



Approve Alternative Selection and Cost Range – Determines the best approach and estimates the project costs.



Approve Performance Baseline – Establishes detailed scope, schedule, and cost baselines.



Approve Start of Construction Execution – Authorizes the beginning of construction or project execution.



Project Completion – Marks the project's readiness for operation.

Why Was CD-0 Approval Important?

CD-0, or “Approve Mission Need,” was the first and foundational step in the CD process for consent-based siting. It validates there is a justified need for DOE's consolidated interim storage facility project for removal, transport, and interim storage of spent nuclear fuel. This approval allows the project to move forward to the next stages of planning and development.

The final site design and license application, incorporating site-specific characteristics, is not completed until after a consent-based agreement with a host community is finalized.

CD-0 Approval



Recognizes the need for a safe, interim storage solution for **15,000** metric tons of spent nuclear fuel.



Lays the groundwork for future expansion to store up to **70,000** metric tons of spent nuclear fuel, addressing half of the projected U.S. inventory.



Initiates three steps to: **1)** design, **2)** license, and **3)** construct the necessary facilities and transportation infrastructure over the next several years.

What's Next After CD-0 for the Consolidated Interim Storage Facility Project?*

- ▶ Slated for completion in **2028**, CD-1 is about selecting the optimal conceptual design, and establishing the cost and schedule range.
- ▶ Slated for completion in **2031**, CD-2/CD-3** finalizes detailed plans and cost and schedule estimates, and signifies the start of construction.
- ▶ Slated for completion in **2046**, CD-4 marks the receipt of the first 15,000 metric tons of spent nuclear fuel. Additional storage capacity will be provided by subsequent capital projects.

*Schedule is being developed, subject to contract processes and Federal appropriations.

**Stages combined, per DOE Project Management office guidance.



Contact Us

For more information, please visit the DOE Office of Nuclear Energy Consent-Based Siting webpage at energy.gov/consentbasedsiting.

Or, contact the consent-based siting team at consentbasedsiting@hq.doe.gov or at (301) 903-3301.