SAND2023-03052M

Site-Wide Environmental Impact Statement for Continued Operation of Sandia National Laboratories/New Mexico (DOE/EIS-0556)

Preliminary Alternatives

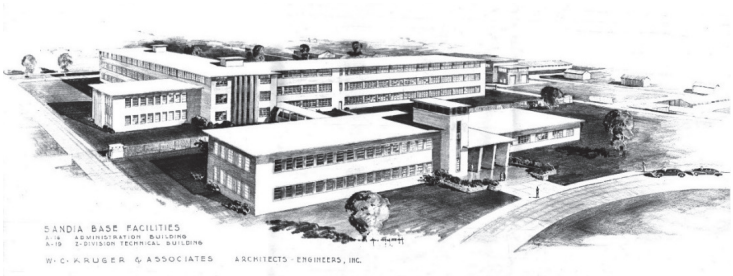
What is the Proposed Action?

The National Nuclear Security Administration (NNSA), a semi-autonomous agency under the U.S. Department of Energy (DOE), proposes to continue operating Sandia National Laboratories/New Mexico (SNL/NM) and managing its resources in a manner that meets evolving NNSA mission lines and that responds to the concerns of affected and interested individuals and agencies. NNSA plans to analyze three alternatives: the No Action Alternative and two action alternatives, Modernized Operations and Expanded Operations (NNSA's Preferred Alternative).

Why do the agencies need to take action (what is the purpose and need)?

The purpose and need for continued operation of SNL/NM has not changed from those identified in the 1999 SWEIS and continue to include supporting NNSA and other DOE missions as directed by Congress and the President. Currently, facilities and capabilities that support many NNSA and other DOE mission priorities are found only at SNL/NM. NNSA needs to continue site operations to meet its core mission requirements. A further purpose of continued operation is to provide capabilities available at the site in support of strategic partnership projects, under which SNL/NM oversees national security-related research, development, and testing programs, and conducts work for other entities, including other federal and state government agencies, industry, and academic institutions.

SNL/NM operations support the following NNSA mission priorities: (1) to enhance U.S. national security through the military application of nuclear energy, (2) to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, produce, and test, in order to meet national security requirements, (3) to promote international nuclear safety and nonproliferation, (4) to reduce global danger from weapons of mass destruction, and (5) to support U.S. leadership in science and technology.



W. C. Kruger & Associates' original sketch of the now historic Building 800, Builidng 801, and Building 802

What alternatives are under consideration?

A preliminary set of alternatives and issues for evaluation in the SWEIS is identified below; during the development of the document, NNSA could identify and include other reasonable alternatives.

No-Action Alternative:

Under the No-Action Alternative, current operations throughout SNL/NM that support currently assigned missions would continue. Regulations implementing the National Environmental Policy Act (NEPA) require analysis of the No-Action Alternative to provide a benchmark for comparison with the environmental effects of action alternatives. This alternative represents maintaining the status quo and would include the programs and activities for which NEPA reviews have been completed and decisions have been made.

Modernized Operations Alternative:

Under the Modernized Operations Alternative, existing programs and activities would continue and be supported by modernizing facilities. This alternative includes the scope of the No-Action Alternative, as described above, plus additional modernization activities. It includes (1) construction of replacement facilities, (2) upgrades to existing facilities and infrastructure, and (3) decontamination, decommissioning, and demolition (DD&D) projects. Under this alternative, NNSA would replace facilities that are approaching their end-of-life, upgrade facilities to extend their lifetimes, and improve work environments to enable NNSA to meet operational requirements.

Sandia National Laboratories is a multimission laboratory managed and operated by National Technology & Engineering Solutions of Sandia, LLC, a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-NA0003525.

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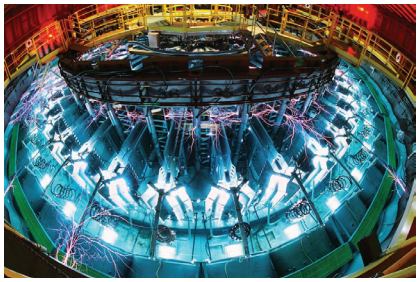

The alternative would also include projects that would reduce the carbon footprint of operations and/or are net zero initiatives. The proposed DD&D of older facilities would eliminate excess facilities and reduce costs and risks. This alternative would not expand capabilities and operations at SNL/NM beyond those that currently exist. Examples of projects that will likely be proposed and analyzed in the SWEIS under this alternative include: (1) Neutron Generator Enterprise Consolidation, which would consolidate operations from existing facilities into a new facility that would have improved workflow, and (2) the Weapons Component Engineering Capability, which would consolidate capabilities from existing facilities into a new facility.

Expanded Operations Alternative (NNSA's Preferred Alternative):

The Expanded Operations Alternative would include the modernization actions in the Modernized Operations Alternative, plus actions that would expand operations and missions to respond to future national security challenges and meet increasing requirements. This alternative includes (1) construction and operation of new facilities and (2) upgrades to existing facilities that result in changing the nature and capabilities of these facilities. It would expand capabilities at SNL/NM beyond those that currently exist. Examples of projects that will likely be proposed and analyzed under this alternative include: (1) the Combined Radiation Environments for Survivability Testing facility, which would replace the Annular Core Research Reactor (ACRR), which is reaching its end-of-life, and expand the capabilities and support additional missions compared to the existing ACRR, and (2) the Next Generation Pulsed Power Facility, which would address important nuclear weapon primary and secondary physics questions and would produce large x-ray and neutron outputs that would help certify weapons survivability in hostile environments in larger test objects than possible today. Such a capability does not currently exist at SNL/NM.

In the Draft SWEIS, NNSA will identify and analyze other actions and specific projects that could expand the capabilities at the site.

Other Alternatives:

Although the 1999 SWEIS included a Reduced Operations Alternative, NNSA does not plan to analyze such an alternative in the SWEIS to be developed. NNSA does not consider a reduction in operations to be a reasonable alternative under NEPA because it does not meet the purpose and need for agency action. That is, under a reduced operations alternative, NNSA would not be able to meet its essential mission needs for the foreseeable future.

How will final details of the alternatives be determined?

NNSA anticipates that details of the alternatives will continue to evolve in response to public scoping comments. The resulting alternatives will be analyzed in detail in the Draft SWEIS.

NNSA invites comments during the public scoping process on the alternatives and issues to be analyzed, including the specific elements, facilities, and areas to be included in the different alternatives.

No-Action Alternative	Modernizing Current Operations	Expanded Operations
Continue current operations throughout SNL/NM that support assigned missions. Includes the programs and activities for which NEPA reviews and decisions have been made.	Continued support of existing programs and activities by modernizing facilities, as necessary. Includes the scope of the No-Action Alternative, plus modernization activities. Includes (1) construction of replacement facilities, (2) upgrades to existing facilities and infrastructure, and (3) DD&D projects.	Includes the scope of the Modernized Operations Alternative, plus actions that would expand operations and missions to respond to future national security challenges and meet increasing requirements. Includes (1) construction and operation of new facilities and (2) significant upgrades to existing facilities. This alternative would expand capabilities and operations at SNL/NM beyond those that currently exist.