



Governance and Management of the Nuclear Security Enterprise

The National Nuclear Security Administration (NNSA) is a semiautonomous agency within the Department of Energy (DOE) that leads the U.S. nuclear security enterprise. The NNSA oversees a workforce of about 1,900 federal employees and over 55,000 contractors, with the latter employed at three national laboratories, several production facilities, and an experimental test site. NNSA's mission is to protect the American people by maintaining the nuclear weapons stockpile, reducing global nuclear threats, and providing the U.S. Navy with naval nuclear propulsion plants. The threats to U.S. national security have evolved significantly since the end of World War II, and the importance of nuclear security and thus NNSA's role in protecting the country's national security remains critical.

NNSA needs to build on progress made and ensure that improvements to date in governance and management percolate throughout the enterprise and become ingrained.

At the request of Congress, the National Academies of Sciences, Engineering, and Medicine and the National Academy of Public Administration formed a joint panel to monitor changes in NNSA's governance and management since the issuance of the 2014 final report of the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, often referred to as the "Augustine-Mies report." The Augustine-Mies report joined multiple other reports in identifying long-standing management problems in the nuclear security enterprise that have contributed to performance problems such as cost overruns and schedule delays.

Since 2014, NNSA has taken a number of steps to address governance and management concerns. Drawing on many interviews, site visits, and discussion groups, the study panel reports improved levels of trust, mission focus, and unity of purpose across the enterprise. However, that progress is fragile, and there is still more work to be done. Maintaining the progress to date and continuing the positive trajectory will not be easy and will require diligence by the NNSA and DOE as well as support from Congress and the Administration.

Illustrative examples of improvements since the 2014 Augustine-Mies report include the following:

- Panel interviews with individuals at all levels of both NNSA and the M&O partner organizations depict relationships that are less adversarial and tending toward more trust.
- DoD and NNSA are collaborating well and most DoD and NNSA personnel interviewed by the panel characterized the overall DoD-NNSA relationship as "good," sometimes using even more positive terms.
- The NNSA issued a Strategic Vision and two other important guidance documents related to governance and management in 2019. Activities by NNSA leaders to communicate and instill the principles and guidance in these documents continue.

NNSA needs to continue to work on remaining governance and management problems and ensure that improvements to date, now largely felt in the upper levels of management, percolate throughout the enterprise and become ingrained. The study panel is cautiously optimistic that these continued improvements, coupled with efforts to measure and institutionalize progress made, will put the NNSA in a strong position to navigate current and future challenges. The current NNSA Administrator has been promoting a vision for continuous improvement, which requires openness and cooperation across the federal headquarters team; the NNSA field offices; and the laboratories, plants, and sites. Openness and cooperation are also essential in the enterprise's collaboration with DoD and other partners.

This report offers suggestions to help NNSA maintain its current momentum for reforming the governance and management of the nuclear security enterprise and steering the associated culture change. The report makes 16 recommendations, which are grouped in four major themes:

- Solidify leadership and support for the mission across DOE and DoD—within the current statutory structure (Chapter 2);
- Reinforce the healthy management practices emerging within NNSA (Chapter 3);
- Take additional steps to maximize the contributions of the M&O partners (Chapter 4); and
- Establish mechanisms and culture for continuous improvement in governance and management (Chapter 5).

For more information and specific details on individual recommendations, download the full report at nap.edu.

PANEL TO TRACK AND ASSESS GOVERNANCE AND MANAGEMENT REFORM IN THE NUCLEAR SECURITY ENTERPRISE:

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