Testimony of

Dr. Donald Levy Albert A. Michelson Distinguished Service Professor Emeritus University of Chicago

and

Co-Chair Tracking and Assessing Governance and Management Reform in the Nuclear Security Enterprise

> Joint Panel of the National Academies of Sciences, Engineering, and Medicine and National Academy of Public Administration

> > Before the

Subcommittee on Energy House Energy and Commerce Committee U.S. House of Representatives

January 9, 2018

Summary of Major Points

- According to dozens of external examinations over at least two decades, governance and management of the nuclear security enterprise raises concerns
- Despite this continuing stream of reports, problems persist
- A panel of the National Academies of Sciences, Engineering, and Medicine and National Academy of Public Administration is operating through 2020 to track and assess NNSA's plans to address these concerns
- That panel has seen promise in some of NNSA's latest reform efforts
- It has also heard from multiple staff members across the enterprise that problems persist
- This large-scale change management requires several elements in order to succeed, one of which is leadership from the top. It is important for the next NNSA Administrator and for DOE leadership to recognize the problems and embrace the challenge.

Chairman Upton, Ranking Member Rush, and members of the committee:

I am Donald Levy, Professor of Chemistry emeritus at the University of Chicago. The University of Chicago is a Management and Operating contractor for the Department of Energy and operates two Office of Science Laboratories, Argonne National Laboratory and Fermi National Accelerator Laboratory. For ten years prior to my retirement in 2016, I was Vice-President for Research and National Laboratories at the university and the person responsible for executing our M&O contracts.

I am a member of the National Academy of Sciences and am here today as cochair of a joint panel of the National Academy of Sciences and the National Academy of Public Administration charged to monitor the efforts of the National Nuclear Security Administration, the NNSA, to address issues raised in several reports concerning NNSA's management and governance of the enterprise. I also wish to acknowledge my NAPA co-chair for the study, Jonathan Breul of Georgetown University. I appreciate your giving me the opportunity to discuss insights we have gained so far in the course of our panel's study.

Our study was requested by Congress in The National Defense Authorization Act of FY2016. It is being carried out by a very strong panel whose membership has extensive experience and excellent credentials in both nuclear security and public administration. It is supported by the NNSA, which has gone out of its way to provide the panel with full information relevant to its tasks.

3

The Congressional request that formed our panel came about because a long series of reports had identified serious concerns in the operations of the nuclear security enterprise. By one count there were more than 50 critical reports over two decades. In spite of all those reports, problems persisted. The concerns in these reports are not about the safety and security incidents you may occasionally read in the paper, and certainly not about the quality of the work being done. Rather, they arise from serious and systemic management and governance problems which have persisted for many years and were perceived as an eventual threat to the national security mission of the NNSA.

Our first report was released last March, and a second is in preparation. Our work will run through the fall of 2020.

The Authorization Act asked in particular that NNSA create a plan to address concerns raised in the most recent critical report, which was produced by a panel co-chaired by Norman Augustine and Admiral Richard Mies. The Augustine-Mies report identified five serious concerns, which it called "systemic problems in both management practices and culture that exist across the nuclear enterprise." They are:

1. A lack of sustained national leadership, focus, and priority;

2. Overlapping DOE and NNSA headquarters staffs and blurred ownership and accountability for the nuclear enterprise missions;

3. Lack of proven management practices, including a dysfunctional relationship between program line managers and mission-support staffs;

4

4. Dysfunctional relationships between the government and its Management and Operating contractors, which has led to burdensome transactional oversight rather than management focus on mission execution;

5. Insufficient collaboration between NNSA and DOD weapons customers, resulting in misunderstanding, distrust, and frustration.

These concerns are not merely vexations, or opportunities for improvement. Rather, they each represent a risk which if not addressed, would eventually erode the nation's ability to provide adequate nuclear security. Each of the concerns in the Augustine-Mies report mirror similar findings in many of the previous reports.

Our study has found—through multiple site visits, numerous meetings and phone calls with NNSA staff members, and study of relevant documents—that NNSA has initiated a large number of changes in response to the Augustine-Mies report and others. But, as noted in our first report, it "has not defined success and it lacks qualitative or quantitative metrics to identify and measure change." Moreover, the changes that have been made seem piecemeal and not as part of a larger, strategic plan intended to address longstanding problems. Our panel continues to press for measures—quantitative or qualitative or qualitative metrics to represe that can indicate whether progress is being made against the serious and persistent concerns.

In our upcoming report, we will provide a more detailed analysis of some of NNSA's more promising changes. But the panel has also heard first-hand from laboratory staff that, in spite of these changes, problems persist.

5

More broadly, NNSA is embarking on a large-scale program of change management in order to alter practices and attitudes that have settled in over decades. In its first report, our panel explained that the experience of many organizations has revealed some common steps that are necessary for effective and lasting change to take root. Not all of those steps are in place at NNSA, and our upcoming report will delve into this. Successful change management, especially at this scale, also requires buy-in and leadership from the top. It is important for the next NNSA Administrator and DOE leadership to recognize the magnitude and persistence of the problems and take on this challenge.

Thank you again for the opportunity to testify today. I remain at your disposal for questions.