

SECRETARY OF ENERGY ADVISORY BOARD

MEMORANDUM FOR: SECRETARY OF ENERGY

FROM: Secretary of Energy Advisory Board (SEAB)

DATE: June 17, 2015

SUBJECT: SEAB Task Force comments on *Aligning the Governance Structure of the NNSA Laboratories to Meet 21st Century National Security Challenges*

You have charged the SEAB National Laboratory Task Force to review studies of the DOE National Laboratories as they appear and to give you advice about what your response should be to their findings and recommendations. This letter transmits the comments of the Task Force (TF) on the recently released report of the Committee on Assessment of the Governance Structure of the NNSA National Security, entitled *Aligning the Governance Structure of the NNSA Laboratories to Meet 21st Century National Security Challenges*. That committee, chaired by Richard A. Meserve, was formed by the National Research Council in response to the FY2013 National Defense Authorization Act which directed the Administrator of the NNSA to “commission an independent assessment regarding the transition of the NNSA laboratories to multiagency, federally funded research and development centers (FFRDCs) with direct sustainment and sponsorship by multiple national security agencies.”

The fundamental question the Committee was asked was whether the national security enterprise would benefit by having the three NNSA labs as FFRDCs jointly sponsored by DOD, DOE, DHS, and the Intelligence Community (IC) to “enhance overall quality of research and engineering, including recruiting and retention; maintain capabilities required to support the nuclear stockpile stewardship and related missions.” The Committee’s report soundly concludes that joint sponsorship of the three NNSA labs is not a path that should be pursued. In addition to the budgetary, political, and operational challenges the Committee believes would result from such a multi-sponsored governance

structure, it finds no evidence that the DOD, DHS, and IC want to take on this sponsorship. Further, in the course of its discussion with representatives from these three agencies, the Committee states that it received no reports of problems in accessing the NNSA labs under the DOE's sponsorship. It concludes that the DOE should remain as the sole sponsor of the three labs as FFRDCs.

In our recent report to you, the SEAB National Lab Task Force found that complicated and duplicative lines of authority and decision-making were imposing increasingly burdensome constraints on operations across the national laboratory system. The Task Force recommended specific steps to clarify roles and responsibilities and to reduce duplication. A multi-agency sponsorship of the NNSA laboratories will only increase confusion and thus we strongly agree with the conclusion of the Committee that this is not a path to follow. We also note that national security work occurs not just in the national security laboratories (LANL, LLNL, SNL), but also in several Office of Science laboratories (e.g. ORNL, PNNL), indicating the importance of aligning all elements of the DOE enterprise to meet national security needs. This alignment is accomplished most simply and directly with a single responsible owner.

An important Committee finding is that while the NNSA laboratories have evolved from "national weapons labs" to "national security labs," there has been no clear articulation of what this change means in terms of the mission of the laboratories or their relationships with other national security agencies and laboratories. The Committee further finds little evidence that multi-agency strategic planning has occurred to align laboratory capabilities with future national security needs. To remedy this situation, the Committee looks to the four-party Mission Executive Council (MEC) and recommends a revitalized "MEC 2.0" as the primary vehicle to define and implement the national security agencies' governance model. In the Committee's view this enhanced MEC would be responsible for periodically providing structured guidance to the DOE and the labs about the MEC partners' mission challenges and directions, engaging in assessments of the laboratories' investment needs, and providing a structured assessment of the laboratories performance and capabilities to meet current and projected national security needs.

We believe the Committee view for “a revitalized “MEC 2.0” as the primary vehicle to define and implement the national security agencies governance model” is in direct contradiction to the Committee’s conclusion that “ownership” of the NNSA and the national security labs should remain solely vested with the DOE. We do not believe the MEC can or should provide the level of operational ownership the Committee states. Rather, the SEAB National Laboratory Task Force agrees with the view expressed in the February 17, 2015 SEAB letter to you commenting on the Augustine-Mies Panel saying that the Mission Executive Council should be a mechanism for improving coordination for use of the special capabilities of the laboratories to meet the emerging challenges of user agencies. SEAB member Dick Meserve who is not a member of the National Laboratory Task Force was chair of the NAS Committee. This difference of opinion has been discussed with him and he will be sending you a letter directly expressing his view.

The TF is aware that its vision of the MEC differs from the 2010 interagency MOU that establishes the MEC. We believe the signatories to this MOU were seeking to facilitate access of several federal agencies, notably DOD, DHS, and the IC, to the DOE laboratories and not on a particular mechanism to achieve this end. An explanation of the difficulties of the proposed MEC structure accompanied by an alternative arrangement better designed to achieve ease of access and improved coordination is likely to be supported by the other interested agencies.

We have previously noted the opportunity for the NNSA to deploy the best practice in evidence in the Office of Science’s stewardship of its science labs. An NNSA headquarters office with primary responsibility for the short and long term health and direction of the national security labs does not exist; its creation is one of the SEAB National Laboratory Task Force’s primary recommendations. Such an office, and not the MEC, should be responsible for facilitating the access and arrangements for access to DOE laboratories that are undertaking work relevant to national security.

The responsibility for developing a strategy and supporting policy for the DOE laboratories lies with the Laboratory Policy Council chaired by the Secretary of Energy. The MEC’s role should be to review this strategy and provide input to the Secretary of

Energy to ensure this strategy aligns with and meets the needs of the national security agencies. The TF also firmly endorses its previous recommendations to extend the use of the capital project management processes used in the Office of Science for its major facilities to the NNSA and DOE energy laboratories.

The Committee report finds that the NNSA Work for Others (WFO) process is still hampered by numerous redundant process steps of burdensome transaction oversight that impede or otherwise devalue cooperation and planning between the laboratories and the agencies. It recommends specifically that the NNSA create standard and structured Work Scope Agreements (WSA) with the national security functional elements in DOD, DHS, and the IC, as well as clearly articulated Work Boundary Agreement (WBA), so that activities that fall within an identified WSA / WBA require only funding discussion and agreement to proceed.

The SEAB TF work agrees with the findings related to the need to remove redundant management approvals. We have previously noted the value of Master CRADA agreements as efficient vehicles throughout the DOE laboratory system for technology transfer to the private sector, and suggest that an analogous construct may serve well in speeding decision-making and contract execution in WFO from across the national security agencies into DOE. Our Phase 2 report will address WFO further; we will provide additional comments related to the Committee's proposed WSA / WBA implementation recommendation, as well as identifying best practices that might be adopted among all DOE labs that perform work for other federal agencies.

The Committee provides extensive comments on the needs for major equipment and facilities investments at the laboratories. It specifically recommends the MEC be tasked with creating a systematic approach for multi-agency investments in the labs, consistent with a rolling decadal planning process that identifies needs within the MEC agencies' missions and guidance for the laboratories to create alignment between mission needs and facilities. While we strongly support the need for this planning process, we believe this kind of responsibility should remain DOE's, and be implemented through the above-noted NNSA laboratory stewardship office. Nothing is more likely to cause

interdepartmental mischief than inviting officials of one agency to assess the investment needs and allocation of another agency. Such a process can easily lead to contradictory priorities, unaffordable requirements, and individual laboratories lobbying to advance their particular relationships with other agencies. These inevitable strains are best resolved within a single agency.

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DOE exists now, more so than ever, in an environment in which many voices are calling for changes in ownership, governance, and organization of various elements of the Department's responsibilities. Because we believe it can serve as a powerful and helpful catechism to drive analysis in addressing any of these opportunities, to conclude this letter report we list below the six key principles the Committee has articulated as necessary to form the basis of any new governance model.¹ While the Committee has developed these to guide its work in assessing a multi-agency shared sponsorship model for the NNSA laboratories, and the wording below reflects this focus, we believe that with minor changes these six principles can serve as a guide in evaluating many of the propositions the DOE is examining.

1. *The mission should be clearly defined.*

The mission of the NNSA laboratories has evolved over the past five decades from an exclusive focus on designing, engineering, testing, and maintaining nuclear weapons to a more diverse and largely undefined mission of advancing "national security."

2. *Clear lines of authority and accountability are essential.*

This principle constitutes a high hurdle to overcome for any new governance model in which multiple agencies (and congressional committees) are involved in setting priorities and making funding decisions at the laboratories.

3. *Recruitment and retention of a talented workforce are critical.*

A primary focus must be on maintaining a world-class science and engineering base in fields related to nuclear weapons, such as materials science, modeling and simulation, plasma physics, microelectronics, and radiation chemistry.

¹ See page 13 of the NAS Committee report.

In addition, vibrant interagency engagement in the WFO programs and education programs, elimination of unnecessary bureaucratic burdens and promotion of a sense of service to the nation are all important for attracting the needed talent and maintaining high employee morale and productivity.

4. *Competition should exist with other science and technology (S&T) providers.*

In areas not closely related to nuclear weapons, there should be the continued expectation that the NNSA laboratories compete (as legally permissible) on a level playing field with other S&T providers for national security resources.

5. *Sustained engagement should exist between the national security agencies and the NNSA laboratories.*

DOD, DHS, and the IC need to be aware of the laboratories' special capabilities, and the laboratories, in turn, need to be aware of the agencies' strategic challenges so the laboratories can develop the necessary capabilities to support the agencies.

6. *The governance structure and operations should be continuously evaluated for cost-effective conduct of mission.*

While the national security agencies perceive that the NNSA laboratories provide unique and valuable capabilities that further their missions, they also find the laboratories to be significantly more expensive than other potential providers.