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OFFICE OF THE PRESIDENT

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Secretary Steven Chu
U.S. Department of Energy
1000 Independence Ave SW
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Dear Steve:

I am writing in response to your request for advice on the management of physical security at the facilities with Category I material under DOE control. You have explained that this request arose as a result of the event at the Y-12 Highly Enriched Uranium Materials Facility in July in which three people, including an elderly nun, were able to penetrate the security fences and to deface the exterior of the building before being apprehended. In addition to this troubling breach, the first responder's casual behavior upon encountering the intruders was completely inappropriate given the nature of the site.

The security challenge confronting the Department is a complicated one for a variety of reasons. The DOE approach to security has evolved since 9/11 from something that is akin to industrial security to a system involving an elite paramilitary force that can defend against a sophisticated terrorist attack. This has been a challenge both because of the need to enhance the capabilities of the protective forces and because the change has entailed significant expense to strengthen security structures and systems at facilities that were not initially designed with this type of security in mind. These changes had to be undertaken within budgetary limitations at a time when the Department needed to pursue many other important (and expensive) programs. The changing demands on the weapons complex over the years have added yet another layer of complexity. And any change in security had to be accomplished within a legal and administrative structure for the Department that is extraordinarily complicated.

The Department has not lacked for an abundance of thoughtful studies on the security issue over the years. Considerable change has been introduced as a result, but the Y-12 episode reveals that problems remain. Although my examination of the security issues confronting the Department has necessarily been limited, I am satisfied that the Y-12 episode has been taken very seriously and considerable effort has been made to ensure that security is strong throughout the complex. I have thus focused on your request to consider whether there are issues relating to the management structure for physical security. I know that you seek confidence that the security obligation will be fulfilled in an effective way for the long term.

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You specifically asked whether the wholesale modification of the management structure for physical security is appropriate. As you know, the current system relies on contractors to provide security. (The details of this approach are discussed further below.) The obvious alternative would be to federalize the protective force (partially or completely) so that the security officers become DOE employees. Federalization could shorten chains of command between federal policymakers and the implementers of security, would encourage consistent application of policies and procedures across sites, would reflect the reality that security is a central federal function at these sites, and perhaps most importantly, would eliminate the potential for strikes by the protective force. Moreover, I understand that the unions at one time advocated such a change in order to deal with retirement and long-term disability concerns of the security officers.

An evaluation by DOE in 2009 concluded that the merits of federalization turned on three factors: implementation of elite force concepts in a cost-effective manner, determination of practical avenues to address retirement and disability concerns, and identification of methods to address potential protective force work stoppages. Memorandum to the Acting Deputy Secretary from T.P. D'Agostino and G.S. Podonsky (Jan. 13, 2009). The review found that the cost issue was the most important factor that should guide a decision and concluded that federalization would result in increased costs without commensurate benefits, particularly given the progress that had been made in implementing the elite force approach using contractors. The review also concluded that federalization did not offer a viable approach to address the union concerns because of the difficulties and complexities of a transition of guards from private-sector employment to federal employment. And, although it acknowledged that the most compelling reason to pursue federalization was to prevent work stoppages by unionized protective force members, it concluded that this risk could be managed by the execution of contingency protective force operations in such a situation, an approach that DOE has had to take in connection with a strike at Pantex. Although to my mind the issue is a close one, I have no informed basis to challenge this recent evaluation.

One additional factor in favor of federalization is that a dramatic change of this nature could facilitate the introduction of a new security culture. In a sense, such a step would serve to wipe the slate clean and demonstrate that very different performance is expected going forward. The Office of Secure Transport uses federal employees and has satisfactorily fulfilled its functions, which serves to show that federalization can work. But no doubt a wholesale change in management structure would be very expensive to accomplish. And, if the protective force were federal employees, the imposition of discipline would be more difficult and in the end federalization could reduce flexibility.

A variant is limited federalization. For example, one might federalize the armed component of the protective forces, while relying on a contractor for the remaining services. This presumably would reduce the cost of the transition

and would recognize the unique federal role of those who are authorized to use deadly force. Since federal employees cannot strike, this approach would facilitate the ability to respond to a work stoppage. But this approach would then complicate the chains of command within the protective forces. And it would make even more difficult the challenge of providing a career path for those in the armed component of the protective forces. (This issue is discussed below.)

I conclude that a decision to federalize all or a part of the protective force would be difficult, would be expensive to accomplish, and would create some new challenges. In the absence of compelling benefits, it is probably not warranted. But it is an approach that may be worthy of consideration if efforts to make the necessary changes cannot be accomplished by a less drastic approach.

A variant to the federalization of the protective force as DOE employees is to engage another federal agency, such as the Department of Defense or the Department of Homeland Security, to provide security. Engagement of another agency to provide security would serve to complicate chains of command and would likely create confusion as to who was in charge at the sites. The interfaces between the DOE and the management and operations (“M&O”) contractors would become even more complicated and confusing. Even if DOE were to engage another agency to provide security, the Department would still be accountable for the security posture. And, although I have not pursued the point, I am doubtful that another agency would be willing take on the task. I conclude that such an approach is not suitable.

I thus conclude that it is reasonable to continue to rely on private contractors to provide security. I hasten to add, however, that there are opportunities to improve the management of security. Some of my suggestions follow:

1. Align authority and responsibility. At Y-12, there was a division of responsibility for physical protection between the contractor responsible for the protective officers and the M&O contractor responsible for the fences, various sensors and other equipment that are part of the physical protection system. The result was a fractured management structure. The interface between the contractors was clearly not functioning: their priorities were not aligned. Cameras in the affected area were out of service and had been for a considerable time and the system of detectors, which had recently been significantly upgraded, was plagued by frequent false alarms. This resulted in a situation in July in which the protective force did not appreciate that the alarms associated with the breach of the fences were “real” and the absence of functioning cameras did not enable the appropriate immediate surveillance of the situation. Although no doubt a system involving multiple contractors could be made to work, a simplified structure in which one contractor is

responsible for all elements of security would provide greater assurance that the security approach is integrated and that issues that otherwise would cross lines between contractors are addressed.

Although a compelling case can be made for assuring that all security functions are the responsibility of a single contractor, there is a subsidiary question whether security should be the subject of a separate contract from that with the M&O contractor. The advantage of separation is that the security responsibility could be allocated to an entity with strong skills in that one area, whereas the M&O contractor presumably must be selected based on a balancing of a variety of capabilities. But, again, separating the security function from the overall site responsibility will require a complicated interface between contractors, with opportunities for miscommunication and misalignment of priorities: security should be an integral part of site operations, not an add-on. Indeed, a single chain of command will be mandatory during a security event. As a result, the favored course, it seems to me, is to require the M&O contractor to fulfill the security function and to ensure, through proper controls, that it meets its responsibilities.

2. Improve federal oversight. It was apparent that the department's system of oversight did not detect and correct the security problems that the Y-12 incident revealed. The large number of false alarms was tolerated, raising questions about the acceptance testing, readiness, and maintenance of the ARGUS system. The cameras were not viewed as critical security equipment, with the result that a significant number were inappropriately allowed to remain out of service for an extended period. There were significant departures from expected procedures by the first responder, as well as significant communication deficiencies. The DOE oversight "system" was seemingly unaware of these problems and, in fact, the evaluations of the security at Y-12 had received consistently high marks in the period before the incident. The overall situation reveals significant failings in oversight by DOE. I appreciate that the approach to oversight does implicate broader issues within the Department as to the degree of freedom and flexibility that should be provided to its contractors.

Part of the challenge in providing proper oversight may relate to the extraordinarily complicated administrative structure within DOE, with security responsibilities spread across several offices at headquarters and between headquarters and the DOE field offices. Indeed, we have had some difficulty in obtaining a clear organization chart that defines the structure for security oversight within DOE. I understand that issues associated with diffuse management are subject to study within the National Nuclear Security Administration ("NNSA") in an effort that is being led by Brigadier General Sandra Finan. A broader examination of DOE's internal management of security should be undertaken in order to

streamline and simplify the structure. The aim should be to establish clear authority and responsibility and to assure that the responsible staff has the right training and experience. Although I appreciate that different approaches to security may well be appropriate as a result of differing circumstances at the various DOE sites, I question whether different standards can be justified as a result of DOE's organizational structure. Efforts to achieve consistency and uniformity would be appropriate.

3. Enhancement of the Protective Force. Perhaps the most puzzling aspect of the Y-12 incident is the behavior of the first responder. He had evidently received the appropriate training, but decided to ignore it. He seems to have immediately concluded that the three intruders were not a threat and, as a result, he treated them as such. Although his assessment proved to be correct, attackers might seek cover for a serious assault by mimicking the appearances that evidently were so reassuring to the first responder. The episode reveals the importance of training and drills to reinforce appropriate actions by the protective force.

There are challenges associated with the maintenance of an appropriately trained protective force. DOE has enhanced the capabilities of its protective forces significantly with the aim of establishing an elite paramilitary capability that can respond to a very capable and sophisticated adversary. The physical qualifications and capabilities of many members of the force must be maintained at a high level, which creates a challenge in establishing a career trajectory for the protective officers. Having a force that maintains its "edge" is difficult, given that actual attacks have not occurred. Indeed, overcoming boredom among the members of the protective force is difficult. The commercial nuclear industry has confronted many of these same challenges and has sought to establish and maintain an esprit among the protective force. It encourages attentiveness by frequent force-on-force drills, regular transitions among posts, and allowing other activities, such as access to the web while on post, in appropriate circumstances. It has sought to respond to the demanding physical challenges that may become more difficult as the security officers age by enabling and encouraging them to migrate to other jobs at the site. In short, it has sought to establish and reinforce that the protective force is an important part of the team that operates the plant and that its members have career opportunities. Some of these lessons may be relevant to the DOE sites.

4. Security Culture. The commercial nuclear industry has learned that the essential ingredient for assuring safe operations is the establishment of a culture in which safety is the highest priority. Management has the obligation to establish such a culture by its words and deeds, including the allocation of resources. Each plant worker has an individual responsibility to assure that any safety issue that a worker observes is

addressed even it is not within the worker's responsibilities; if a supervisor fails to respond, the worker is obligated to raise the issue to a higher level and severe sanctions are imposed if any retaliation against such a worker occurs. Given the critical importance of security at the Category I sites, I believe that an analogous security culture needs to be established at the DOE sites. That is, everyone on the site should understand that security is his or her responsibility. Establishing such a culture will be difficult in a system in which individuals are otherwise encouraged to focus on individual responsibilities, but truly effective security requires such a change.

5. Balance. The Y-12 episode has appropriately caused a heightened awareness of the importance of physical security. This focus should not be allowed to unduly distort DOE's efforts. The aim should be to evaluate security using a systems approach that integrates physical, cyber, and personnel security in order to reduce aggregate vulnerabilities. Balance should be maintained.

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In developing my thinking on the charge that you presented, I have had the benefit of interactions with Norm Augustine and Don Alston, as well as substantial assistance from the Center for Strategic and International Studies ("CSIS"). I was aided by extensive materials assembled by CSIS with DOE assistance concerning the various security reviews undertaken over the years, by site visits, by discussions with DOE and contractor staff, and by interviews with knowledgeable individuals. (Some of these interviews were undertaken by CSIS staff.) I very much appreciate this assistance. Nonetheless, this letter reflects my perspective. My comments should not be attributed to the various individuals who have helped to shape my judgments.

I hope this letter is helpful. Please feel free to contact me if you have any questions.

Best regards.

Very truly yours,



Richard A. Meserve