

February 15, 2005

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
DUKE ENERGY CORPORATION)	Docket Nos. 50-413-OLA
)	50-414-OLA
)	
(Catawba Nuclear Station)	
Units 1 and 2))	

NRC STAFF RESPONSE IN OPPOSITION TO
BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S
MOTION TO RE-OPEN THE RECORD ON SECURITY CONTENTION 5

INTRODUCTION

On February 7, 2005, Blue Ridge Environmental Defense League (BREDL) filed a Motion to Re-Open the Record on Security Contention 5. BREDL seeks to add a speech made by Spencer A. Abraham, former Secretary of Energy to the record. The motion is supported by the declaration of Edwin Lyman and a second speech. The Nuclear Regulatory Commission staff (Staff) hereby opposes the motion for the reasons set forth below.

BACKGROUND

Duke Energy Corp. (Duke) applied for a license amendment to possess formula quantities of Strategic Special Nuclear Material (SSNM) in the form of Mixed-Oxide (MOX) Lead Test Assemblies (LTAs) at its Catawba Nuclear Station. Duke sought exemptions from certain NRC regulations due to the nature and form of the material and Duke procedures already in place. The Board admitted one security contention, Security Contention 5, and hearing was held on the contention between January 11 and 14, 2005. The hearing concluded on January 14, 2005, and the parties were instructed to file Findings by February 1, 2005 and Reply Findings by

February 8, 2005. Along with its Reply Findings, BREDL submitted a Motion to Re-Open the Record based on evidence of a speech made by Energy Secretary Spencer Abraham on January 18, 2005.

Also in support of its motion, BREDL provides two speeches made by the Secretary Abraham, whose statements have no bearing on NRC policy or regulation, to support its argument for reopening the record. For the reasons fully discussed below, BREDL does not meet the stringent standard required for the reopening of a record as set forth in 10 C.F.R. § 2.734 and its motion should be denied.

DISCUSSION

As a preliminary matter, in the factual background of the Motion to Reopen, BREDL misstates that the primary responsibility of the tactical response team (TRT) is "to protect the plutonium MOX LTAs from theft." BREDL Motion at p. 3. The regulations define the TRT as "the primary response force for each shift which can be identified by a distinct item of uniform, armed with specified weapons, and whose other duties permit immediate response." 10 C.F.R. § 73.2(a). Additionally, 10 C.F.R. § 73.20(a) states that the "physical protection system [of which the TRT is a part] shall be designed to protect against the design basis threats of theft or diversion of strategic special nuclear material and radiological sabotage as stated in § 73.1(a)." Nowhere in the regulations does it state that the TRT's primary responsibility is protection from theft, to the exclusion of radiological sabotage. Cross/Garrett Affidavit at ¶ 11, attached hereto as Exhibit A.

A. Standards for Reopening the Record

A motion to reopen a closed record to consider additional evidence must be timely, address a significant safety or environmental issue, and must demonstrate that a materially different result would be likely had the newly proffered evidence been considered initially. 10 C.F.R. § 2.734(a). The motion must be accompanied by one or more affidavits which set forth the factual and technical bases for the movant's claim that the criteria of 10 C.F.R. § 2.734(a) have been met.

10 C.F.R. § 2.734(b). The affidavits must be given by competent individuals with knowledge of the facts alleged, or experts in the disciplines appropriate to the issues raised. *Id.* Evidence contained in the affidavits must meet the admissibility standards set forth in 10 C.F.R. § 2.743(c), that is; the evidence must be relevant, material, reliable and not unduly repetitious.

The proponent of a motion to reopen the record bears a heavy burden. Reopening is required only when new evidence is shown to be timely, safety or environmentally significant and sufficiently material to have changed the result initially reached. *Kansas Gas & Electric Co.* (Wolf Creek Generating Station, Unit 1), ALAB-462, 7 NRC 320, 338 (1978). The Commission expects its adjudicatory boards to enforce the 10 C.F.R. § 2.734 requirements rigorously, that is, to reject out-of-hand reopening motions that do not meet those requirements within their four corners. *Public Service Co. Of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-915, 29 NRC 427, 432 (1989), *citing Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1 (1986) and *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 & 2), CLI-86-7, 23 NRC 233 (1986).

In the Statement of Considerations accompanying the Final Rule promulgating 10 C.F.R. § 2.734, "Criteria for Reopening Records in Formal Licensing Proceedings," the Commission stated that reopening will only be allowed where the proponent "presents material, probative evidence which either could not have been discovered before or could have been discovered but is so grave that, in the judgment of the presiding officer, it must be considered anyway." 51 Fed. Reg. 19,535, 538 (1986).

The criteria set forth in 10 C.F.R. § 2.734(b) require that the supporting material accompanying a motion to reopen

must set forth with a degree of particularity in excess of the basis and specificity requirements contained in 10 C.F.R. § 2.714(b) for admissible contentions. Such supporting information must be more than mere allegations; it must be tantamount to evidence . . . and possess the attributes set forth in 10 C.F.R. § 2.743(c) defining

admissible evidence for adjudicatory proceedings. Similarly, the new evidence supporting the motion must be relevant, material, and reliable.

Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-89-1, 29 NRC 89, 93 (1989), quoting *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), ALAB-775, 19 NRC 1361, 1366 (1984). For the reasons set forth below, BREDL's motion to re-open the record must be denied as it fails to meet any of the requirements of 10 C.F.R. § 2.734.

1. BREDL's Motion Is Not Timely as the Information Contained Therein Could Have Been Discovered Prior to the Close of the Hearing

The Commission's regulations at 10 C.F.R. § 2.734(a)(1) require that "[t]he motion must be timely, except that an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented." BREDL's evidence is not timely, nor does it present an exceptionally grave issue. Therefore, the motion does not satisfy fails this criterion of the regulation and should be denied.

"[F]or a reopening motion to be timely presented, the movant must show that the issue sought to be raised could not have been raised earlier." *Diablo Canyon*, 19 NRC at 1366. BREDL seeks to introduce a speech made on January 18, 2005, subsequent to the hearing in this matter. It claims that the evidence is timely because the speech was not made until after the hearing. See BREDL Motion at pp. 6-7. This argument is flawed because, regardless of the timing of this particular speech, the information contained therein had been widely available through a variety of internet sources since May of 2004. See Cross/Garrett Affidavit at ¶¶ 4-6; see also Attachments C-F.

Specifically, on May 7, 2004, Secretary Abraham gave a similar speech outlining many of the planned initiatives discussed in the January speech. There, he announced the plans to create a protective force with an "elite mission focus" which is the focus of BREDL's motion. BREDL Attachment 3 at ¶ 9. The information had also been available through other sources prior

to January 18, 2005. For example, on May 11, 2004, Kyle E. McSlarrow, the Deputy Secretary of DOE, testified before the Subcommittee on Oversight and Investigations and laid out virtually identical information. See Attachment B.

BREDL now claims that Secretary Abraham's speech is new because it "constituted the first time when Mr. Abraham described the elite protection force program as something that had been implemented." BREDL Motion at pp. 6-7. This is a mischaracterization of Secretary Abraham's words. As discussed above, the January 18th speech communicated no new information. He did not describe any specific program which had already been implemented, instead he stated that "the Department has also instituted its 'elite protective force' *initiative*"; a direction to "the NNSA and the SSA to jointly review the options available to the Department to achieve the implementation of an elite force"; and recommendations "that the Department undertake a series of specific actions designed the elevate protective force capabilities to the elite level." Nowhere in the Secretary's January speech was there a reference to implementation of a detailed program that had been instituted to establish an elite protective force. See Cross/Garrett Affidavit at ¶ 7. Instead, both speeches announced the "initiative". An initiative, is not an implemented program. This *initiative* remains in its preliminary stages and has not been promulgated through DOE orders or regulations. See Cross/Garrett Affidavit at ¶ 8.

The information that BREDL seeks to introduce as a basis for reopening the case does not meet the "timeliness" standard. It has been readily available to the public from a variety of sources since May of 2004 and no new information was conveyed in January 2005. Furthermore, as discussed here and in more detail below, this unimplemented initiative is not even relevant to this proceeding. Therefore, it could not constitute a "grave" issue which would justify reopening the record. Therefore, the January speech is not a proper basis for reopening the record and BREDL has not met its heavy burden. See *Waterford Steam Electric Station*, 23 NRC at 5 (requiring the intervenor to satisfy a "heavy burden" to open a closed record").

2. BREDL's Motion Does Not Address a Significant Safety Issue

BREDL's motion does not address a significant safety issue. 10 C.F.R. § 2.734(a)(2) states that the "motion must state a significant safety or environmental issue." This motion states neither a significant safety nor an environmental issue. "In order for new evidence to raise a 'significant safety issue' for purposes of reopening the record, it must establish either that uncorrected... errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely." *Diablo Canyon*, 19 NRC at 1366 (citing *Union Electric Co. (Callaway Plant, Unit 1)*, ALAB-740, 18 NRC 343, 346 (1983)). The evidence sought to be admitted here does not meet this standard. DOE's future plans for protection at its facilities do not raise any legitimate doubt as to Catawba's ability to operate safely.

As discussed below, the DOE initiative is not applicable to NRC facilities and therefore does not address any issue pertinent to this proceeding's license amendment and exemptions granted under NRC regulations. See Cross/Garrett Affidavit at ¶ 14. Furthermore, Ms. Cross and Mr. Garrett explain that the speeches only indicate a proposed upgrade to the current DOE forces. None of the proposed improvements have been implemented by DOE and are otherwise not relevant to the instant proceeding. *Id.* Even evidence of a continuing NRC effort to improve reactor safety has been found insufficient to warrant the reopening of a record, therefore, the existence of the DOE initiative that has no conceivable applicability to NRC proceedings would clearly be insufficient as well. *Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2)*, 11 NRC 876, 887 (1980)(finding that evidence of improvements are "neither novel nor unexpected" and are insufficient to reopen a record). Therefore, BREDL fails to meet this criterion of the regulation.

3. The Evidence Offered by BREDL Is Irrelevant to this Proceeding and Would Not Materially Alter the Result

The Commission's regulations require that "[t]he motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially." 10 CFR § 2.734(a)(3). This evidence can not and would not change the outcome of this hearing because it is wholly irrelevant to the proceeding. "If such evidence is to affect materially the previous decision (as required by the Commission), it must possess the attributes set forth in 10 C.F.R. § 2.743(c) defining admissible evidence for adjudicatory proceedings. Specifically, the new evidence supporting the motion must be 'relevant, material, and reliable.'" *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), 19 NRC 1361, 1366 (1984). The evidence presented here meets none of these criteria.

The DOE initiative is irrelevant to this proceeding because Duke has requested exemptions from NRC regulations, not DOE regulations. See Cross/Garrett Affidavit at ¶ 14. DOE regulations are not applicable to NRC facilities. A DOE "initiative" to establish an "elite protective force" - details of which are not provided, and without proof, cannot be assumed to have more rigorous requirements than those in place for the security force currently at Catawba - has no bearing on Duke's request for exemptions from NRC regulations or to thee admitted contention. Cross/Garrett Affidavit at ¶ 14. The DOE initiative described in the speeches has no bearing on the outcome of this case.

The only reference to DOE requirements in the Staff's testimony was with regard to DOE MC&A requirements to determine attractiveness. Cross/Garrett Affidavit at ¶ 18. There was no reference in Secretary Abraham's speech to the MC&A requirements and therefore, nothing in his speech has any impact on the Staff's attractiveness determination. Cross/Garrett Affidavit at ¶ 13. BREDL is not seeking to add anything new to that discussion with the proposed evidence. *Id.*

Finally, the evidence may be reliable only to the extent that the statements were made by Secretary Abraham - if, when, and how the initiative comes to fruition remains to be seen. Evidence that is not in its final form "is not a particularly useful item on which to rely." *Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3)*, 22 NRC 5, 43 n. 47 (1985)(finding that a draft of a document is not reliable). BREDL cannot ask the Board to rely on evidence which has no practical application, and which has not been finalized. Therefore, for the purpose which BREDL is proposing to utilize it, the evidence is unreliable. Accordingly, BREDL's motion does not meet the standards set forth in 10 C.F.R. § 2.734 because the evidence proffered does not meet the general evidence standard of 10 C.F.R. § 2.743 and would not materially alter the outcome of the hearing and the motion must therefore be denied.

CONCLUSION

For the reasons stated herein, BREDL has failed to meet its burden necessary for the Board to re-open the record. The motion addresses no significant safety issues, is untimely and would not materially alter the decision in the proceeding. Therefore, BREDL's Motion should be denied.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Shana Zipkin', written over a horizontal line.

Shana Zipkin
Counsel for NRC Staff

Dated at Rockville, Maryland
this 15th day of February, 2005

ATTACHMENT A

February 15, 2005

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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DUKE ENERGY CORPORATION)	Docket Nos. 50-413-OLA
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(Catawba Nuclear Station)	
Units 1 and 2))	

AFFIDAVIT OF SHERRI CROSS AND ALBERT GARRETT IN OPPOSITION TO
BREDL'S MOTION TO REOPEN THE RECORD ON SECURITY CONTENTION 5

COUNTY OF MONTGOMERY)	
)	SS:
STATE OF MARYLAND)	

Sherri Cross and Albert G. Garrett, having first been duly sworn, do hereby state as follows:

1. (Cross) My name is Sherri Cross. I am a Senior Safeguards Technical Analyst at the United States Nuclear Regulatory Commission (NRC). I have 17 years of experience with the NRC and the Department of Energy (DOE). For the last 10 years I have worked in the field of safeguards and security. Specifically, I was the Material Control and Accountability (MC&A) Team Lead for the DOE Rocky Flats Field Office for 8 years (1995-2003), where I was directly responsible for implementation of the MC&A program, oversight of security vulnerability analyses, and developing local safeguards and security policy for the Rocky Flats closure project. I have reviewed the Declaration of Dr. Edwin Lyman in Support of Blue Ridge Environmental Defense League's Motion to Reopen the Record (Lyman Affidavit) and I disagree with Dr. Lyman's characterization of the January 18, 2005 speech by the outgoing Secretary of Energy, Spencer A. Abraham, and his conclusions relating thereto. See Blue Ridge Environmental Defense League's

Motion to Re-Open the Record on Security Contention 5 (Motion to Re-Open), Attachment 2 (February 7, 2005).

2. (Garrett) My name is Albert Garrett. I am a Senior Security Specialist at the NRC. I have over 24 years of progressive experience with the NRC, the DOE, DOE support service contractors, and DOE facility operating contractors in positions ranging from laboratory technician to Safeguards and Security Specialist. I have reviewed the Lyman Affidavit and I disagree with Dr. Lyman's characterization of the January 18, 2005 speech by DOE Secretary Abraham, and his conclusions relating thereto. See Motion to Re-Open, Attachment 2.

3. As discussed below, the information contained in Secretary Abraham's speech was available to the public in May of 2004. The January 18, 2005 speech did not add new information, but rather, only provided some updates.

4. On May 7, 2004, Secretary Abraham gave a speech at the 32nd Annual Security Police Officer Training Competition. See Motion to Re-Open, Attachment 3. In that speech, he stated:

[W]e have all admired the elite military units defending our country – units like the Delta Force, the Rangers, or the SEALs. Today, in this room and in some parts of the Department, we have units that meet this same high level of excellence.

But I foresee a future in which we have transformed all of the protective forces that have direct responsibility for the protection of our most sensitive assets, such as Category I and II Special Nuclear Materials, into a force with that kind of elite mission focus.

The hallmark of this force will be advanced tactical skills, intensive training, and the highest professional and physical fitness standards.

Attachment 3 at 9.

Secretary Abraham went on to say:

[Achieving this vision] may mean establishing a special, elite federal force for protection of Category I and II SNM.

* * * I expect that within two years we will have a program that will enable us to improve and build our protective forces into a uniform group capable of fully meeting the immense challenges of an ever changing security environment.

Id. at 10.

5. A press release issued by DOE contained more information regarding Secretary Abraham's initiatives. *See Id.* at 13 ("Spotlight on . . ." page 1 of 4).

6. On May 11, 2003, Kyle E. McSlarrow, Deputy Secretary of DOE, gave testimony before the Subcommittee on Oversight and Investigations. The testimony is publicly available. In that testimony, attached hereto as Attachment A, Mr. McSlarrow echoed Secretary Abraham's May 7th remarks. *See Attachment A* at 6-7.

7. The January 18, 2005, speech, using language very similar to the May 7th speech, still did not contain firm policy changes. It included the following statements:

We are comprehensively studying that question (that of a federal force) now in order to determine the best, most effective option.

I foresee a future in which all protective forces directly responsible for the protection of our most sensitive assets are transformed into such an elite fighting force.

Upon announcement of these security initiatives, I directed the NNSA and SSA to jointly review the options available to the Department to achieve the implementation of an elite force at DOE facilities possessing Category I or II qualities of SNM.

Motion to Re-Open, Attachment 2 at 7.

Secretary Abraham went on to discuss recommendations made by NNSA and SSA, none of which have been implemented. *Id.* at 8.

8. The speeches cited above were specific to proposed upgrades to training, physical standards, organization, and utilization of DOE protective forces. These improvements have not been promulgated through DOE Orders or implemented.

9. In Paragraph 7 of his affidavit, Dr. Lyman states that “[t]he public does not have routine access to DOE orders regarding security issues.” Contrary to Dr. Lyman’s assertion, the public does, in fact, have access to DOE orders, including the orders containing requirements for protective forces. See <http://www.directives.doe.gov/directives/current.html>.

10. In our testimony, the NRC staff referred to DOE MC&A requirements in order to determine the attractiveness of the MOX LTAs. Tr. at 4979-4983. The exemptions requested by Duke relating to the Tactical Response Team (TRT) were from NRC requirements, not DOE requirements.

11. Dr. Lyman asserts that the five person TRT is dedicated to protecting the MOX fuel from theft. Lyman Affidavit at ¶ 2. This misrepresents the exemptions requested by Duke and the requirements contained in the regulations from which Duke seeks the exemptions. 10 C.F.R. § 73.20(a) requires that “[t]he physical protection system shall be designed to protect against the design basis threats of theft or diversion of strategic special nuclear material and radiological sabotage as stated in §73.1(a).” Dr. Lyman’s assertion that a TRT must be dedicated only to theft is inconsistent with the language in §73.20(a). In addition, the Duke License Amendment Request (LAR) (Ex. SEC SAF1) and the Duke Physical Security Plan (Ex. SEC SAF 23) specifically address protection against both the threats of theft or diversion and radiological sabotage, as required by 10 C.F.R. § 73.20(a). This misstatement by BREDL was fully aired and refuted in testimony by Duke and the Staff (Tr. at 3908-28, 5010, 5072-75, and 5155), and thus is not a basis for reopening the record.

12. (Cross) Dr. Lyman again disputes my testimony regarding how DOE would classify the MOX LTAs. Lyman Affidavit at ¶ 3, 4. As demonstrated in the NRC Staff’s testimony and in the Staff’s Reply findings, I have years of experience working with the DOE categorizations and have

demonstrated, contrary to Dr. Lyman's unsupported and uninformed assertion, that if these MOX LTAs were at any DOE facility in the Nation, they would be categorized as Category II SSNM. *See* Tr. at 4982. The required level of protection would then be applied for Category II quantities of material. Thus, this assertion does not provide a basis for reopening this record.

13. As stated above, the January 18, 2005 speech by Secretary Abraham did not change the DOE MC&A requirements that informed the Staff's conclusion that the DOE would categorize the MOX LTAs as Category II, Attractiveness Level D material, which would specifically not be a Category I quantity. This issue of attractiveness of the MOX LTAs has already been exhaustively covered in the record.

14. The January 18, 2005 speech describes DOE initiatives to implement recommendations for protective force improvements in the future. The fact that these are DOE initiatives that one day in the future may be implemented at DOE Category I and II facilities to address the DOE Design Basis Threat (DBT) has no bearing on this case. The hearing record in this case pertains to specific exemptions, requested by Duke, from currently codified NRC requirements, not future DOE protective force training requirements, which may or may not be realized. A speech by the Secretary of Energy relating to DOE protective force improvement initiatives in no way alters the NRC codified requirements; therefore, it has no bearing on this case and provides no justification to reopen the record.

15. Secretary Abraham's May 2004 speech, which contained the same information that BREDL claims did not come to light until January 18, 2005, was not made part of the record in this case, even though it was available well before the hearing. Therefore, it and any subsequent updates to it (i.e., the January 18, 2005 speech) are not newly discovered and are inadmissible at this point. They provide no justification for reopening the record.

16. Dr. Lyman mischaracterized Secretary Abraham's January 18th speech, implying that the DOE initiatives have already been implemented. Yet, the words used in the speech are clear: "[t]he Department [DOE] must continue to proceed with the implementation of these and other protective force recommendations to achieve the elite protective force envisioned in this initiative. There will be significant hurdles (sic) to overcome..." Clearly, this DOE initiative is not implemented and will not be in the near future (6 months). Therefore, in addition to not being relevant to this hearing, these speeches are not timely, in that they speak to possible future actions of the DOE. Thus, they are irrelevant to the exemptions requested by Duke from current NRC requirements for the MOX LTAs and provide no basis for reopening the record.

17. Dr. Lyman's characterization that "...the DOE is significantly upgrading its requirements for armed responders..." is a misrepresentation of the two speeches. See Lyman Affidavit at ¶ 9. In addition to describing proposed initiatives and recommendations for improvement, the speeches describe possible theoretical developments and improvements in DOE requirements, and have no bearing on this case.

18. As stated above, the DOE initiative to improve protective force training and capabilities is not relevant to this case. In Paragraph 10 of his affidavit, Dr. Lyman misrepresents the Staff actions by asserting that the Staff is proposing to downgrade its requirements with respect to the use of MOX fuel at Catawba. As the Staff testified, the requirements of 10 C.F.R. Parts 11 and 73 from which Duke is seeking exemptions are normally applied to fuel cycle facilities processing Category I quantities of SSNM. Tr. at 4981-82. As the record already demonstrates, the Staff evaluated Duke's request in the context of four MOX LTAs at Catawba for a finite period. *Id.* at 3873-74, 3917-3918, and 4975-4981. The Staff evaluated the exemption requests against the codified requirements, informed by previous Commission decisions (i.e., Ft. St. Vrain exemptions,

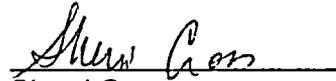
Ex. SEC 25) and DOE MC&A requirements for categorization and attractiveness of SSNM. *Id.* at 4974-4985.

19. Additionally, Dr. Lyman asserts that “[t]he Staff’s proposal is inconsistent with the NRC’s stated policy of requiring NRC licensed facilities possessing formula quantities of SSNM to have ‘protection equivalent to that in place at comparable [DOE] facilities.’ Final Rule, Safeguards Requirements for Fuel Facilities Possessing Formula Quantities of Strategic Special Nuclear Material, 53 Fed. Reg. 45,447 (November 10, 1988),” is related to the instant case. Lyman Affidavit at ¶ 10. First, this information was not presented during the hearing, is not new information, and is, therefore, not admissible at this time. Second, as the title of the Final Rule indicates, the Rule is applicable to Fuel Facilities possessing formula quantities of SSNM, not to a Part 50 licensee possessing MOX LTAs for a finite period of time, which is the subject of this hearing.

20. Contrary to Dr. Lyman’s opinion as stated in paragraph 11 of his affidavit, evolving DOE standards and setting an example for Russia are not the subjects of this hearing. The instant case only involves Duke’s request for exemption from specific NRC requirements for use of four MOX LTAs at Catawba for a finite period of time. The Duke exemption requests must be evaluated against current NRC regulations. There is no new information raised in paragraph 11 that supports reopening the record.

21. Dr. Lyman opines that “it is clear that all parties have offered DOE’s security program as a guidepost for the Atomic Safety and Licensing Board’s decision in this case. Therefore, the information provided in Secretary Abraham’s speech could have a material bearing on the outcome of this proceeding.” Lyman Affidavit at ¶ 12. Dr. Lyman again misrepresents the testimony presented in this case. In fact, the parties have not offered DOE’s security program as a guidepost for the Board’s decision. As the record demonstrates, this hearing relates to specific exemption

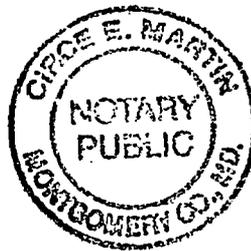
requests by Duke from specific currently codified NRC regulations. The references to DOE in this hearing, other than the DOE transportation team, were specifically to DOE MC&A requirements, not to the DOE security programs, as asserted by Dr. Lyman. The Staff simply stated that in addition to NRC regulations and Commission decisions, the DOE MC&A requirements were used to inform the Staff evaluation of the attractiveness of the MOX LTAs to assist in the review of the exemptions requested by Duke. The hearing record is already clear on this issue and there is no basis for reopening the record.


Sherri Cross


Albert G. Garrett

Sworn to before me this
15th day of February, 2005

Notary Public
My commission expires: March 1, 2007



CIRCE E. MARTIN
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires March 1, 2007

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Witness Testimony
 The Honorable Kyle E. McSlarrow
 Deputy Secretary
 US Department of Energy
 1000 Independence Avenue, SW
 Washington, DC, 20585

DOE Nuclear Security: What Are the Challenges, and What's Next?"
 Subcommittee on Oversight and Investigations
 May 11, 2004
 2:00 PM

Mr. Chairman and Members of the Subcommittee, thank you for inviting me to testify today about the Department of Energy's ongoing and planned security activities. This Administration is committed to ensuring that national assets in our custody are safeguarded with robust protection systems. In light of the current world situation and terrorist threat, the task of maintaining effective protection at Department sites demands our continuous, collective, and concentrated effort. For the past three years, and particularly since the terrorist attacks of September 11, 2001, we have focused aggressively on security and counter-terrorism related activities.

The Department of Energy has facilities worth billions of dollars. We have many thousands of employees. Moreover, we are the custodians of national security assets that, simply put, must not be allowed to fall into the wrong hands. We have protected the complex in the past; and we are protecting it now. However, we are convinced that we must make certain changes. We must improve. We must adapt to a world that changed three Septembers ago in order to protect this complex successfully in the future.

Last Friday, Secretary Abraham delivered a major speech outlining his vision for the Department's future protection program, and initiatives for implementing his vision. The Subcommittee asked that we discuss the issues outlined by the Secretary in that speech. Although the Secretary's speech focused on the future, the initiatives he announced are just the latest in a series of changes that have been the product of almost continuous review for three years.

Immediately on September 11th, we imposed an elevated Security Condition, or SECON, and increased physical security at all Department of Energy (DOE) facilities, with particular attention to our most sensitive targets. Actions varied from site to site based on unique local characteristics, and because of exigent circumstances, many immediate actions that we undertook were manpower-intensive solutions involving more protective force activities. Today, we remain at a heightened state of alert. Understandably, this has resulted in unprecedented overtime for many of our protective forces, and has had an impact on training and professional development opportunities.

We realize that our protective forces cannot withstand the stress of continuous overtime indefinitely. To relieve this strain on our forces and achieve more cost effective security over the long term, we have accelerated our technology application activities to allow us to employ technology to replace some routine protective force commitments. Also, we shared our expertise with other Federal agencies involved in homeland security, and we streamlined the process for them to obtain access to unique

DOE counter-terrorism capabilities.

Unclassified Page 2

We have revised our personnel security program so that we are better able to balance our need to hire new professionals with appropriate clearances in this high-threat environment. We are now beginning to experience relief from the long clearance delays after 9/11, and we have gained insight for streamlining these processes even further.

In 2003, we instituted a new Design Basis Threat (DBT), which has and will influence our security posture dramatically. Based in part on The Postulated Threat to U. S. Nuclear Weapons Facilities and Other Selected Strategic Facilities, a report published by the Defense Intelligence Agency in January 2003, the Department's revised DBT identifies and characterizes potential threats to our facilities and provides design bases and performance standards for our protection systems. The revised DBT is our best assessment of current terrorist capabilities, expanding the number and capability of adversaries and determining our means to overcome them.

The new DBT requires significant upgrades to protection systems at all DOE sites, and is reflected in a substantial increase in our FY 2005 budget request to Congress. The President's \$1.3 billion FY 2005 security budget is just one measure of the importance given to security.

While we are working to implement the requirements of the revised DBT throughout the complex, there are long lead-times and cost considerations. Some sites must undertake major construction projects, and consolidation of target materials will push DBT compliance to Fiscal Year 2006. In the meantime, compensatory measures are in place to protect our assets.

But we are moving quickly to implement DBT requirements where we can now. Therefore, the Secretary recently proposed a \$55 million FY 2004 reprogramming. This request is pending with Congressional Committees, and we look forward to its approval so we may move forward on critical activities.

The Department is making structural changes to enhance its security and counter-terrorism capabilities. Last summer, and again in testimony before Congress, the Secretary suggested that our national security would best be served by consolidating the two counterintelligence programs within the Department into one office reporting directly to the Office of the Secretary.

Based on extensive review, we found that the current bifurcated counterintelligence functions between the Department of Energy and the National Nuclear Security Administration (NNSA) could be an impediment to coherent and effective counterintelligence activities. We believe this must be corrected; therefore, we have proposed legislation to the Congress to effect the needed consolidation. The proposal is before the Armed Services Committees of the House and Senate and has been referred to the full House Energy and Commerce Committee. Mr. Chairman, we seek your support for this important security initiative.

Unclassified Page 3

We believe that having a single counterintelligence office reporting directly to the Secretary of Energy will create a more streamlined and effective program, clarify accountability, and provide a clear line of authority for policy development and implementation. The NNSA Administrator, the National Counterintelligence Executive, the Director of Central Intelligence, and the Director of the Federal Bureau of Investigation join Secretary Abraham and me in this view.

Also in 2003, the Secretary established the Office of Security and Safety Performance Assurance (SSA) to improve security management and foster more collegial relationships between the Headquarters and field offices that form the Department's safeguards and security network. We know that, while line managers are accountable for implementing security programs, constructive Headquarters and field interactions can accelerate improvement in our protection programs and yield

more effective results. The SSA is now serving as the Department's primary catalyst for increasing the timeliness and effectiveness of protection program upgrades, and ensuring that appropriate technologies can be deployed where and when needed.

A Vision of Security for the 21st Century

By and large, security throughout DOE is excellent. But it has to be better. We are familiar with the reports of poor performance during force-on-force tests, of sleeping on duty, and of lost keys. For the most part, we know that lapses in security are rare. But, any lapses are unacceptable — and the failure of any and all levels of management to address lapses cannot be tolerated.

Our philosophy on security is quite simple: When it comes to the security of the Department with responsibility for maintaining the nuclear weapons stockpile, providing nuclear propulsion for the Navy, and coordinating global nonproliferation efforts, there is no room for error. To ensure that this philosophy guides day-to-day security management in the Department, the Secretary has proposed several initiatives.

Information Security

The first initiative involves information security. In an age of computers, the Internet, and other supercomputing advances, we have to give a 21st century focus to information security. Our nation has become increasingly aware of cyber threats in many critical arenas. The DOE must take actions to protect the confidentiality, integrity, and availability of all our information systems to assure that we can continue to perform our mission even while under cyber attack. To accomplish this, we have several new initiatives.

Unclassified Page 4

First, we have directed the Office of Security and Safety Performance Assurance – or SSA – through its Office of Cyber Security and Special Reviews, to expand performance testing of DOE information systems, including the use of “red teaming,” no-notice vulnerability scanning and penetration testing of unclassified information systems, and expanded testing of classified systems. Only through universal and rigorous performance testing can we identify our actual and potential vulnerabilities to existing and emerging cyber threats, and only by knowing of these vulnerabilities can we eliminate them.

Second, we will implement a Cyber Security Enhancement Initiative to:

- ensure instantaneous dissemination of cyber threat information throughout the Department;
- select and deploy expanded intrusion detection systems to rapidly identify potential hostile cyber attacks;
- develop and implement policies and procedures to minimize the exposure of DOE information systems to Internet threats;
- improve cyber security and cyber security awareness through enhanced workforce training; and
- refine policies and implement processes to enhance operational security of publicly available online information, by assuring that inappropriate collections of information are not available on our web sites and servers.

Most of these actions should be completed within the next year. There are also a number of longer term actions included in this initiative, involving the development and deployment of advanced methods and tools associated with such tasks as intrusion detection, malicious mobile code detection, and improved configuration management and vulnerability scanning of desktops, servers, and networks.

Third, we should work toward a more secure approach for classified desktop computing. We have had problems in the past with classified hard drives and classified disks. To permanently eliminate the threat of such problems, we propose an initiative to move to diskless workstations for classified computing over the next five years. Drawing on the unparalleled expertise of our national laboratories, we have directed the Department's CIO, in partnership with the NNSA, to evaluate and advance the state of the art in high-speed diskless computing technologies, so that in five years desktop weapons design functions can be performed in a diskless environment.

At that point, no insider would be able to transport classified data in electronic form outside of the site on physical media. All physical media will be controlled under a two-man rule in central locations. The accidental movement of data would be dramatically reduced, and inventory and accountability of classified information will become simpler. In the meantime, we will continue to improve the aggressive accountability programs we have already put in place.

Unclassified Page 5

Security Technology

Other technologies can also be employed to enhance our protection systems and reduce some of the burden currently borne by our protective forces. Technology can serve as a force multiplier to save protective force members from unnecessary risk in case of attack, and provide additional response time to meet and defeat an attack. We must use technology intelligently, and to our advantage.

We have experienced a number of problems with lost keys and key cards. This is not only unacceptable; it is also unnecessary. We intend to do away with the use of mechanical keys as an element of our protection system. Keyless access control technology exists, and is currently in use at a small number of locations throughout the Department. These include swipe card/PIN combinations, mechanical and electronic cipher locks, and various types of biometric devices. We have not moved to these technologies on a large scale yet.

The Secretary has announced an initiative to identify suitable technology alternatives that will enable the Department to transition, in phases over the next five years, to a keyless security environment, where access is not afforded by any physical item or object that can be lost or stolen. This effort is beginning with a pilot program in the National Nuclear Security Administration, and will later be expanded to appropriate facilities throughout the Department.

The initiative will identify appropriate technological approaches to access control, identify technology areas that require further development, and provide seed funding for NNSA sites to begin our early transition to a keyless environment. The fruits of this initiative will not only result in enhanced security but, over time, will bring greater cost effectiveness to our access control programs. The NNSA Office of Nuclear Safeguards and Security Programs will work jointly with the DOE Office of Security to deploy this technology initiative.

Today, the scientific community is developing new security technologies much faster than we can apply them. To allow us to get ahead of the technology curve, we have directed NNSA and SSA to establish a Blue Sky Commission charged with identifying emerging security technologies that we should invest in, or possibly modify for our use. This will be a long term-effort to complement our near-term proposals, and will focus on technologies that could alter security over the coming decades.

Consolidation of Materials

Now I would like to turn to this Department's responsibility for safeguarding the nation's most dangerous nuclear materials at 11 DOE sites around the country – sites that require the highest levels of security.

Unclassified Page 6

Let me begin by strongly emphasizing that these materials are often closely tied to ongoing missions that are critical to our national security. But we do have to be mindful of the risks. Thus, we have a responsibility to balance the important work we do at our facilities, which is often critical to the war on terror, with protecting those very same facilities against the threat of terrorist acts. Ultimately, we need to reduce the number of sites with Special Nuclear Material to the absolute minimum, consistent with carrying out our missions, and to consolidate the material in each of those sites to better safeguard that material.

We are already moving forward to consolidate nuclear materials. We have accelerated a number of projects to close sites more quickly than previously thought possible. Examples include the Rocky Flats Environmental Technology Site, Fernald, K-25, and others. We have a number of other facilities that will be de-inventoried soon in preparation for decontamination and decommissioning. These include F canyon at Savannah River Site, Building 3019 at Oak Ridge National Laboratory, and the 100K basins, Fast Flux Test Facility, and the Plutonium Finishing Plant at Hanford.

Critical to the consolidation effort is the availability of final storage locations. We have been discussing the shipment and storage of Special Nuclear Material with a number of state governors, Congressional delegations, and concerned citizens. Based on these efforts, we believe that we can achieve agreements that will allow our consolidation efforts to continue and even further accelerate in the future.

We have also included in our 2005 budget request funding to increase the transportation assets of the Office of Secure Transportation. This will enable us to maintain current shipment schedules and accommodate additional future shipments. In the meantime, we are considering other opportunities for consolidation.

For example, after operations of three years or perhaps less, the Sandia Pulse Reactor will no longer be needed, because computer simulations will be able to assume its mission. This represents an intelligent substitution of advanced technology for brute force. When its mission is complete, this reactor's fuel will be removed from Sandia National Laboratory in New Mexico, allowing us to reduce security costs at Sandia and further consolidate our nuclear materials.

Another important activity that we have embarked upon is the construction of the Highly Enriched Uranium Materials Facility at the Y-12 National Security Complex in Tennessee. This building is being designed from the beginning to emphasize not only operational needs, but also to provide unparalleled security to the Special Nuclear Materials stored there. This will be one of the best examples of applying security-oriented construction techniques and technology to the problem of securing materials.

Unclassified Page 7

In addition to providing enhanced protection for the materials within the HEU Materials Facility, completion of this building will allow us to perform an extensive on-site consolidation of the HEU stored at Y-12. In the next several months, the Department will issue a new RFP for construction of this facility on an expedited basis. This consolidation will allow us to remove all the Category I and II Special Nuclear Material from two buildings within the Protected Area, allowing us to shrink the Protected Area to about half its present size. Shrinking the Protected Area will save substantial costs when a newly configured Perimeter Intrusion Detection and Assessment System is installed, and it should allow us to more intelligently deploy our manpower.

Also, as we announced on March 31st of this year, all Category I and II Special Nuclear Material will be removed from Technical Area-18 at Los Alamos National Laboratory. This effort is proceeding, and the first material movements are expected to begin later this year. Once the material has been moved, we will permanently end any use of TA-18 involving Category I or II Special Nuclear Material.

Finally, there have been a number of questions raised about other materials across the complex. We have asked our management team to look at three issues. First, we need to address how to resolve situations where materials are being stored at sites only because they do not meet the acceptance

criteria for our longer-term storage sites.

Second, while the requirements of Stockpile Stewardship mean that we must retain nuclear materials at Lawrence Livermore National Laboratory today, over the long term we should look for a better solution. We have previously told the Congress that we will conduct a review of the requirements for the weapons complex over the next 20 years. This study, which we expect to be completed early next year, will examine the implications of the President's decisions on the size of our stockpile, of the new Design Basis Threat, and of the opportunities for consolidation that we are announcing today. As part of that review, we will consider whether certain essential work performed at Livermore could be relocated to allow us to remove the Category I and II material stored there.

Third, we need to explore whether we can down-blend substantial quantities of our HEU holdings. Potentially, this could yield a number of security benefits, but the programmatic impact of a major campaign of down-blending needs to be assessed. We have also directed NNSA to conduct a study to assess the down-blending of large quantities, perhaps as much as 100 tons, of the HEU stored at Y-12 and to assess the programmatic impacts of such a large campaign.

We have asked that each of these inquiries be completed by the end of the year.

Unclassified Page 8

Protective Forces

Finally, in addition to enhancing technology and consolidating materials, we want to address what we must do to build a modern, efficient, effective guard force able to meet 21st century threats. The threat change most visible to us is reflected in the revised DOE Design Basis Threat that we issued last year. This policy requires us to prepare to fight and defeat an adversary force much larger than we had previously thought. This has a significant impact on protective force members, as well as on all other elements of our protection systems.

We intend continually to review and refine the threat and our responses to it. We have therefore directed the NNSA Administrator and the Directors of the Office of Security and Safety Performance Assurance and the Office of Intelligence to re-examine the Design Basis Threat and the intelligence data supporting it in light of recent events and report back in 90 days. Moreover, we are requiring that this reassessment take place on an annual basis.

We must also address issues specifically affecting our protective forces. We have established a stringent set of common qualification standards for DOE Security Police Officers, and a comprehensive training regimen to ensure that necessary individual and team skills are maintained. Our security personnel represent the very best, not just in the DOE complex, but in the world. But, across the complex, the skill levels and qualifications of protective force members can vary widely.

To staff up our protective forces to meet the current threat, we are depending on too much overtime. To keep the burden as low as possible, local managers have made decisions about what training is absolutely necessary to squeeze into everyone's schedule, and what posts absolutely must be manned.

After two and a half years of this, there is insufficient uniformity in training. Meanwhile, staffing levels across the complex are no longer based on common criteria. This obviously presents challenges, especially when the protective force at a site needs to be temporarily augmented by protective force members from other sites. At present, we have to depart far from our routine methods of operation to address such needs. But, we are taking a number of steps to address these issues.

First, the Office of Security and Safety Performance Assurance has begun implementing a set of changes at the National Training Center that will more closely focus their programs on basic DOE safeguards and security training. We believe this will soon result in training that is better tailored to the post-9/11 environment we are now facing.

Unclassified Page 9

Second, since 9/11, we have directed all sites to conduct more frequent force-on-force exercises to provide additional training opportunities.

Third, we have obtained authority from the Congress to use the Office of Personnel Management to perform some of our background investigations. This should greatly reduce the time required to complete the process of granting security clearances.

Of course, it is not just the protective forces that need to maintain the highest standards. It is their Federal overseers as well. Recently, Ambassador Brooks asked a commission headed by Admiral Henry Chiles to examine the specific needs of the National Nuclear Security Administration regarding the recruitment, development, and maintenance of security expertise. Based on the recommendations made in Admiral Chiles's report, we have instructed NNSA to take several immediate steps to implement corrective actions. Most notably, we are establishing a safeguards and security Intern Program to focus on the recruitment of highly qualified technical personnel in the areas of cyber security, nuclear material control, and physical security.

We have also asked NNSA to put together a long-term human capital management program based on the report's findings. Finally, though the Chiles Report focuses on NNSA, we believe its recommendations can apply to the entire safeguards and security community at the Department of Energy. So we have instructed the top management of the Department to look for ways to extend Admiral Chiles's recommendations to the entire Department.

Important as they are, these actions are just the beginning. If we are to continue to ensure the protection of our most important national assets, it is vital that we continue to challenge conventional thinking and strive for innovative new ways to enhance our security posture.

In the aftermath of 9-11, we have admired the elite military units defending our country -- units like the Delta Force, the Rangers, or the SEALs. Today, we have units among the DOE protective forces that meet this same high level of excellence. But we foresee a future in which we have transformed all of the protective forces that have direct responsibility for the protection of our most sensitive assets, such as Category I and II Special Nuclear Materials, into a force with that kind of elite mission focus. The hallmark of this force will be advanced tactical skills, intensive training, and the highest professional and physical fitness standards.

Unclassified Page 10

Achieving this vision may be a challenge, but we must have a common standard of excellence throughout our protective forces. There are a number of alternatives we are considering to accomplish this vision. And since the stakes are so high, the Secretary has insisted that everything is on the table.

It may mean implementing common contract language for protective force contracts complex-wide, and requiring all field elements to award independent protective force contracts separate from site management and operating contracts. It may mean awarding a common, complex-wide protective force contract for, at a minimum, those protective force elements that protect Category I and II SNM. And it may mean establishing a special, elite federal force for protection of Category I and II SNM.

After getting input from various quarters and various experts, we will make our decisions and recommendations. We expect that within two years we will have a program that will enable us to improve and build our protective forces into a more-uniform group, capable of fully meeting the immense challenges of an ever changing security environment.

Improvement in Management Culture

Finally, all of the improvements that we seek -- in our protective forces, in our cyber security efforts and our application of new technologies, and in how we store nuclear materials -- must be accompanied by

tangible management improvements that ensure that early warning systems are in place to detect process failures, with accountability and consequences for such failures. That calls for a change in our management culture.

First, we must be willing to take constructive criticism, analyze it, and respond when appropriate. Too often, we have seen a reflexive dismissal of ideas or suggestions not invented at DOE, whether they be from a Member of Congress, a government oversight organization like the GAO, or an outside stakeholder organization like POGO. That is not how a first-class organization behaves.

Second, as the Secretary told a gathering of DOE management two years ago:

"I am concerned that too many employees believe that their only recourse to address system failures is to go to the media or the Inspector General.

And that is a result that should concern us all. It tells me that, fairly or unfairly, many of our employees believe that when they raise issues they will either be ignored, or, worse, harmed in terms of their career.

"That is a failure of leadership. And starting with me, I expect every manager down the line to make clear that we expect these concerns to be taken seriously and addressed quickly and effectively."

Unclassified Page 11

This is a serious – and absolutely necessary – change. Neither the Secretary's nor my views has changed since he made those remarks. In our judgment, the system has not changed enough to that effect, but we are working on it. We need a system where management is more responsive and where people don't need to find a third party to get a fair hearing for their concerns. The reason is plain: People should never have to be worried about the perils of doing their jobs honestly, safely, and correctly. People should not be afraid to bring problems to the attention of management, or worried about facing retribution rather than receptiveness. That is not a healthy working culture – and it sows the seeds of failure and inefficiency in other areas.

Our expectation is that if we are able to implement a system – a culture – where people can legitimately air concerns, then everyone will benefit. Our workforce will be more effective. The public's confidence in this Department will improve. And America's security will be greatly enhanced. That is a goal we are all aiming for. It goes hand in glove with the other improvements we seek in constructing an effective 21st century security apparatus.

These are the broad directions in which our security apparatus must move in order to meet the challenges the future holds. We are committed to putting them into effect. We are committed to making bold changes where necessary because, ultimately, the Department of Energy complex, our assets, our employees, and our fellow countrymen deserve and require the highest levels of security.

All of the initiatives highlighted today are designed to build and support the most robust and motivated protective force in the world. We will therefore do what it takes to recruit, train and appropriately compensate the outstanding men and women who have chosen to assume the responsibility of securing this nation's strategic deterrence capability. In order to recruit and retain expert safeguards and security personnel, we must consider as many options and reforms as possible despite the potential for initial resistance. We welcome any suggestions you, Mr. Chairman, or Members of the Subcommittee may have to share with us.

Conclusion

Mr. Chairman and Members of the Subcommittee, we are fully cognizant of the tremendous responsibility we have for protecting the special materials and information entrusted to us at the Department of Energy. We have worked for more than three years to implement effective new protection programs throughout DOE. We have introduced several worthwhile initiatives to eliminate

specific identified risks, and Secretary Abraham and I continue to be fully committed to the Department's safeguards and security programs. With your help, we are committed to pursuing the initiatives outlined today, in the interest of our national security.

Thank you.

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DOE Reports Lax Security at Both Privately Owned and DOE Nuclear Facilities - 05/14/2004

Secretary of Energy Spencer Abraham announced a set of sweeping new initiatives to improve security across the Energy Department's nationwide network of laboratories and defense facilities, particularly those housing weapons-grade nuclear material.

Addressing a gathering of top security officers from across the DOE complex, Abraham noted that the Energy Department, which develops and maintains the nation's nuclear weapons stockpile, is responsible for protecting critical national defense assets that "simply put, must not be allowed to fall into the wrong hands."

The secretary unveiled initiatives to expand the capabilities of DOE security personnel, including possibly federalizing some security units currently managed by contractors; consolidate sensitive nuclear material into fewer locations; enhance protections of classified computer information; upgrade security systems at key facilities; and make managers more receptive to security concerns.

"Since the stakes are so high," Abraham told the security officers at DOE's Savannah River Site, "everything is on the table," including the possibilities of common labor-contract language for security groups across the DOE complex or establishing "a special elite federal force" to protect the most sensitive installations. To maximize the effectiveness of DOE security forces, Abraham said the DOE will consider the creation of a specialized security contingent to guard the department's high-priority nuclear facilities, with capabilities similar to the military's Delta Force or Navy SEAL units.

Abraham acknowledged recent reports of security lapses, such as lost keys, at some DOE sites, but he called the incidents rare. "But frankly, rare or not, they are unacceptable, and the failure of any and all levels of management to address instances such as these will not be tolerated," he said.

Addressing the issue of lost keys and key cards, Abraham said he intends to "do away with the use of mechanical keys as an important part of our protection system," and replace them with sophisticated new technologies that will allow a keyless security environment, where access is not afforded by any physical item or object that can be lost or stolen.

Abraham also called for regular reviews of DOE security standards and procedures to ensure "a modern efficient, effective guard force able to meet 21st century threats," and for new programs to train security officers and test their readiness to respond to attacks or attempts to infiltrate facilities.

To ensure that DOE's security establishment functions effectively, Abraham called for a change in the department's management culture to improve the way the department accepts, analyzes and responds to criticisms and concerns from outside the department as well as from employees, who Abraham said should be confident about raising questions or concerns without fear of retribution. "If we are able to implement a system – a culture – where people can legitimately air concerns, then everyone will benefit. Our workforce will be more effective, the public's confidence in this department will improve, and America's security will be greatly enhanced," he said.

"We are committed to making bold changes where necessary," Abraham added, saying that the new security initiatives "are designed to build and support the most robust and motivated protective force in the world."

Applauding the U.S. Energy Department's new initiative to improve security at nuclear weapons facilities, the nation's largest union of private security officers called for the government to go a step further and conduct a comprehensive review of security at the nation's privately owned nuclear power plants, which also have been criticized for lax security.

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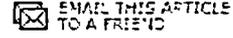
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"Nuclear plants are just as sensitive as weapons facilities, and they're often guarded by the same private company," said Stephen Lerner, director of the Building Services Division of the Service Employees International Union (SEIU), the nation's largest union of private security officers. "A review of security at nuclear power plants should be on the table as well. We cannot afford vulnerabilities at any sites where nuclear material is present."

- Sandy Smith



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May 08, 2004

New Security Weighed for Nuclear Sites

[New Security Weighed for Nuclear Sites](#)

WASHINGTON (AP) - After a rash of security lapses, the Energy Department is looking to create an elite force of federal guards to protect plutonium and weapons-usable uranium from terrorists, while also preparing plans to move some of the material to more secure areas.

By H. JOSEF HEBERT

Energy Secretary Spencer Abraham on Friday outlined a sweeping set of proposals to increase security at nearly a dozen government facilities that hold highly radioactive material that could be used to fashion a crude nuclear device.

These materials "must not be allowed to fall into the wrong hands," declared Abraham in a speech to security guards participating in a skills competition at the department's Savannah River complex near Aiken, S.C.

Abraham cited "poor performance" in mock security exercises at some weapons sites and other lapses - such as lost keys to secure areas - and shortcomings in training to buttress his call for new security measures. Although rare, he said, such lapses are unacceptable.

A Department audit recently found guards at one facility cheating in mock tests by obtaining advance information about an assault during a test. Another investigation found guards inadequately trained in such basic tasks as using a shotgun.

For the first time, the Energy Department is closely looking at creating a federal police force to guard nuclear weapons facilities and establish a specially trained "elite" force to protect areas with the most sensitive nuclear weapons material, Abraham reported.

The sites, including federal weapons labs and other facilities such as the Savannah River complex where Abraham spoke, now are guarded by private contractors. The number of guards is classified.

Abraham said the department was also moving toward consolidation of nuclear material because some facilities holding weapons-usable material may never be able to meet the most stringent security requirements being demanded in light of the Sept. 11, 2001 attacks.

The department acknowledged for the first time Friday that plutonium used for weapons-related research at the

Lawrence Livermore National Laboratory in California may have to be moved.

Abraham said he expected to make a decision on that by early next year as part of a broad review on the needs of the nuclear weapons complex over the next 20 years. Consolidation is "one of the surest ways" to increase protection of weapons-grade uranium and plutonium, he said.

"Because the stakes are so high everything is on the table," Abraham said.

Livermore lab officials have opposed removing the plutonium, arguing that it is needed for a number of research programs related to maintaining the nation's stockpile of nuclear warheads. But, said Abraham, "over the long term we should look for a better solution" and suggested that some of the work at Livermore might be shifted elsewhere so the plutonium could be move to a more secure, remote location.

Some members of Congress and an independent watchdog group, the Project on Government Oversight, have argued for some time that Livermore, nestled in a suburban, residential setting 40 miles from San Francisco, is ill-suited for having plutonium on site.

Abraham also said that highly enriched weapons-suitable uranium now at the Sandia National Laboratory near Albuquerque, N.M., will be removed within three years as a research reactor there is closed down. The department previously announced plans to transfer plutonium at the Los Alamos National Laboratory, also in New Mexico, to the Nevada Test Site where better security conditions exist.

He noted the department also is building a central facility at the Y-12 National Security Complex in Tennessee to consolidate highly enriched uranium within that sprawling site and disclosed that the government may "downblend" as much as 100 tons of the uranium there so it can't be used for a nuclear weapon.

Critics of DOE security programs reacted cautiously.

Danielle Brian, POGO's executive director, praised Abraham's initiatives, but added that the department "and its contractors have a long history of stonewalling security reforms."

"He's outlined the most important things that need to be done," she said. "But we still need to see them happen."

Rep. Ed Markey, D-Mass., accused the department of "recycling initiatives made public years ago" and long advocated by watchdog groups and members of Congress. "The secretary should be implementing bold changes that address these (security) problems," not promising to consider reforms, said Markey.

On the Net:

Energy Department www.energy.gov

Project on Government Oversight www.pogo.org

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May 17, 2004
Volume 82, Number 20
p. 10

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DOE TOUGHENS SECURITY PLAN

Federalizing security forces, merging nuclear materials are proposed

[JEFF JOHNSON](#)

A wide range of security enhancements for the nation's nuclear weapons labs were announced on May 7 by Department of Energy Secretary Spencer Abraham.

If enacted, Abraham's initiatives would toughen security at DOE's weapons plants and its laboratories that house nuclear materials. But nearly all of the Initiatives require study before implementation.

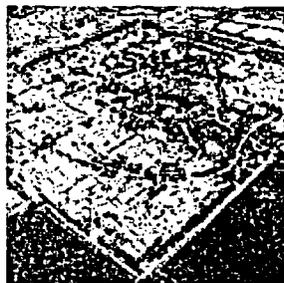
Abraham said reported incidents of guards sleeping on duty and employees repeatedly losing keys, as well as other indicators of poor performance at DOE facilities, although rare, were unacceptable and will not be tolerated. He proposed the initiatives as well as a new culture where lab staff can air their concerns about security to managers without fear of retribution, rather than seek out the news media or the inspector general's office.

Among the most sensitive proposals Abraham is considering is shifting and consolidating weapons-grade nuclear material to fewer locations within the DOE complex. This could include relocating defense-related materials and work from Lawrence Livermore National Laboratory to other weapons labs.

DOE also is investigating the possibility of federalizing its security forces and creating a single, highly specialized elite federal force within the department, rather than relying mostly on contract security forces, as is the case today.

Also, Abraham proposed that, within five years, all lab computer workstations would be disk-free, reducing the possibility of stealing classified material. And staff members would use scanning systems instead of mechanical keys to enter secure facilities in the future, Abraham said.

Better training, more frequent security tests at high-security facilities, and better recruiting of qualified security personnel were also promised

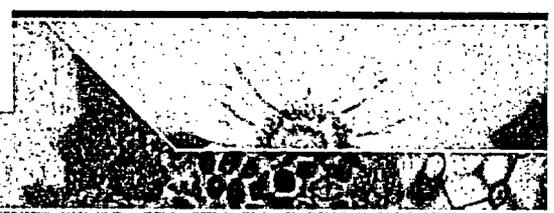


SHIFT? DOE may remove nuclear weapons work from Lawrence Livermore National Laboratory.
DOE PHOTO

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Issue Brief

DOE's Domestic Nuclear Security Initiatives

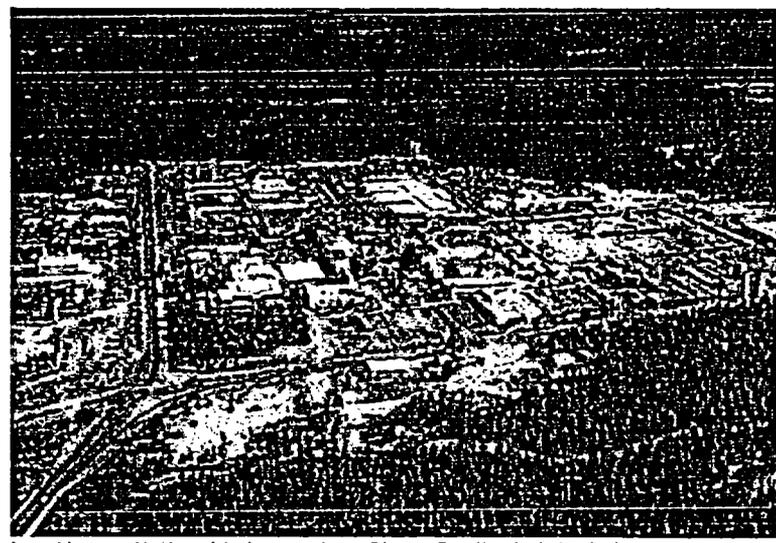
Hugh E. Naylor IV and Charles D. Ferguson
Center for Nonproliferation Studies
July 2004

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Issue Brief

Since September 11, 2001, the state of security at several U.S. Department of Energy (DOE) nuclear facilities has come under increasing scrutiny. In October 2001, the Project on Government Oversight (POGO), a non-governmental organization that serves as a watchdog on the federal government's activities concerning security of nuclear facilities, issued the report *U.S. Nuclear Weapons Complex: Security at Risk*. [1] The report identified five major security problems in the nuclear weapons complex:

- Nuclear materials are spread across the country.
- The bureaucracy has made security tests easier rather than fixing problems.
- Independence in oversight of nuclear security at DOE facilities is lacking.
- Computers containing nuclear secrets remain vulnerable.
- DOE [Department of Energy] security forces have been cut by almost 40% since 1992.



Los Alamos National Laboratories Photo Credit: Bob Nichols, USDA

The U.S. government's own watchdog, the General Accounting Office (GAO), found similar potential vulnerabilities at many nuclear facilities managed by the National Nuclear Security Administration

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- » Comprehensive Test Ban Treaty (CTBT) на русском (In Russian)
- » DOE's Domestic Nuclear Security Initiatives
- » IAEA Board Deplores Iran's Failure to Come into Full Compliance: Is Patience with Iran Running Out?
- » IAEA Board Welcomes EU-Iran Agreement: Is Iran Providing Assurances or Merely Providing Amusement?
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- » Iran and the IAEA: A Troubling Past with a Hopeful Future?
- » Nuclear Posture Review на русском (In Russian)
- » Nuclear Submarine Dismantlement на русском (In Russian)
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- » Risks of Civilian Plutonium Programs
- » Russian Spent Nuclear Fuel на русском (In Russian)
- » Russia's Nuclear Doctrine
- » Submarine Dismantlement Assistance
- » Tactical Nuclear Weapons (TNW) на русском (In Russian)
- » The AQ Khan Revelations and Subsequent

(NNSA), the agency within DOE responsible for maintaining safeguards and security over nuclear materials. In particular, in May 2003, GAO issued a report that concluded, "NNSA has not been fully effective in managing its safeguards and security program in four key areas." These are:

- Defining clear roles and responsibilities for NNSA's headquarters and site operations.
- Assessing security activities at nuclear sites.
- Overseeing contractors' corrective actions.
- Allocating staff to correct for shortfalls in number of employees and in expertise of those personnel at site offices.[2]

The GAO report underscores inconsistencies in DOE and NNSA's oversight of security forces at nuclear facilities. In particular, NNSA site offices have employed two different approaches. "Three of the seven NNSA site offices use the traditional survey approach, as required by DOE policy, to oversee security activities, while four have discontinued surveys and instead rely on surveillance activities." While a survey "provides a comprehensive annual review, by a team of experts from throughout NNSA," a surveillance approach is much more cursory and typically involves only "one or a small number of NNSA site officials" reviewing "one or more security activities." [3]

News media reports also have highlighted potential weaknesses at DOE nuclear facilities. In November 2003, the *Washington Post* reported that DOE's Inspector General, Gregory Friedman, had determined that DOE employees had lost a dozen keys to sensitive facilities, requiring the U.S. government to spend millions of dollars to change thousands of locks.[4] Also in November 2003, *Vanity Fair* magazine profiled Richard Lavernier, a former senior DOE nuclear security specialist, who had run security intrusion exercises for the U.S. government for six years. "In more than 50 percent of our tests of the Los Alamos facility," he stated, "we got in, captured the plutonium, got out again, and in some cases didn't fire a shot because we didn't encounter any guards." [5] DOE's January 2004 Inspector General's report *Protective Force Performance Test Improperities* identified potential security flaws at the Y-12 National Security Complex in Oak Ridge, Tennessee, where hundreds of tons of highly enriched uranium (HEU), which can be readily used in nuclear bombs, are stored.[6]

DOE's New Security Vision

In response to this mounting criticism, Secretary of Energy Spencer Abraham unveiled four broad initiatives, in a May 7, 2004, speech at the Savannah River Site in Aiken, South Carolina, to bolster security at nuclear facilities nationwide, as well as to transform DOE's "management culture" to foster an environment where "whistleblowers"—individuals working at government facilities who observe serious flaws in security practices—are encouraged to voice concern.[7] First, Secretary Abraham proposed a plan to augment Internet and information-related security at DOE's facilities. DOE plans to implement high-tech, Internet-based defense measures, designed to frustrate hackers and other cyber-threats, and to transmit timely warning of potential and actual cyber-threats to DOE employees. Additionally, DOE plans to move to a "media-less" computing system where no computer disks (removable hard-drives, floppy disks, or compact disks) are used, so as to prevent thieves and other malicious people from walking away with nuclear weapons design information and other sensitive data on nuclear arms and materials.

Second, DOE will overhaul the physical security infrastructure at its facilities. Secretary Abraham intends to phase out traditional keys to sensitive facilities over a five-year period, replacing them with more

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» на русском (In Russian)
- » **Biological Weapons Convention (BWC) Compliance Protocol**
» на русском (In Russian)
- » **The Fifth Conference of the Biological and Toxin Weapons Convention (BWC)**
» на русском (In Russian)

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sophisticated devices, such as biometric security systems, which are less susceptible to unlawful use. He also stated that he will establish uniform and realistic training methods for DOE security personnel. Existing security measures at facilities have recently come under fire for multiple failings such as a lack of sufficient manpower to repel a terrorist intrusion, unrealistic training exercises where guards have prior knowledge of simulated threats, and reductions in necessary training time.[8]

While DOE issued a revised post-September 11, 2001, design basis threat (DBT) in May 2003, Abraham called for annual assessments and upgrades to the DBT to ensure maximum preparedness against evolving threats. The DBT is an official assessment of the plausible, but challenging, threats that security personnel at nuclear facilities should be able to repel. Abraham also suggested possible federalization of security forces and even the creation of an elite security force, resembling an Army Ranger or a Navy SEAL unit, to quell and deter terrorist plots. Currently, private contractors hire and train security guards at DOE nuclear facilities; however, DOE and NNSA are responsible for providing oversight, as discussed above. Regardless of whether federalization of guard forces takes place, Abraham announced that he planned to introduce better methods to recruit top quality security employees, including faster background checks to obtain security clearances, improved employee benefits, and an intern program designed to attract quality personnel.

Third, Secretary Abraham proposed a strategy to consolidate strategic special nuclear material into fewer facilities. This nuclear-weapon-usable material is defined as plutonium or highly enriched uranium (HEU) enriched in the isotopes uranium-233 or uranium-235. Specifically, he envisioned: removing HEU fuel from the Sandia Pulsed Reactor in a three-year period; accelerating the construction of the HEU Materials Facility at the Y-12 National Security Complex that would combine the two existing HEU storage facilities; permanently relocating all the most dangerous nuclear materials from Technical Area 18 (TA-18) at Los Alamos National Laboratory (LANL) in New Mexico; relocating "essential defense-related research" and respective nuclear material at Lawrence Livermore National Laboratory (LLNL) in California to another site; and investigating the feasibility of down-blending about 100 tons of HEU at Y-12 to non-weapons-grade enrichments.

Fourth, as noted earlier, the Secretary called for a change of "management culture" at DOE that encourages constructive criticism, saying that "people should never have to be worried about the perils of doing their jobs honestly, safely, and correctly."

Rationale Behind DOE's Initiatives

All the proposed initiatives, when implemented, will significantly strengthen security at DOE facilities. But it is important to understand the basis of these initiatives, from the exposed security blemishes that led to their proposal to the threats that they are designed to address.

The proposal to augment information security measures intends to decrease the susceptibility of classified weapons-related material to theft or unlawful use. Accessing sensitive data from removable computer disks and CDs would be relatively easy if such media were improperly stored, misplaced—for example, in the Fall of 2002, when it was reported that 200 missing computers from LANL may have contained classified information[9]—or misused by insiders. For example, if terrorists or states seeking nuclear weapons seized computer disks containing sensitive nuclear-weapons blueprints, they could essentially leapfrog an otherwise significant obstacle to constructing functional nuclear weapons. This is similar to the threat

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posed by the illicit nuclear trading network of A.Q. Khan, from which North Korea and Iran allegedly acquired some of their nuclear know-how and where Libya, before its public renunciation of WMD, acquired uranium enrichment technologies and weapons designs.

The proposed physical security enhancements try to rectify potentially exploitable security insufficiencies at DOE nuclear facilities. Immediately after the 9/11 terrorist attacks, DOE elevated security at these facilities. However, according to an April 2004 GAO report, the prolonged heightened security posture has "been expensive and has resulted in fatigue, retention problems, and less training for sites' protective force."**[10]** GAO further concluded that uniform, even federalized, security training and evaluation standards would relieve much of the stress that has been overwhelming security personnel for more than two years. Moreover, the DBT was suffering from archaic threat assessments that failed to account for those formulated by the intelligence community's Postulated Threat, **[11]** which, as described by Joseph S. Mahaley of the DOE's Office of Security, is:

*based on intelligence information detailing actual terrorist attacks and the equipment and tactics utilized in the attacks, expert judgments regarding stated terrorist intentions and the ability of the terrorist to execute the stated objectives, and postulated capability based on the latest knowledge concerning terrorist activities.**[12]***

For example, according to the same GAO report, DOE's 2003 DBT anticipated attacks from smaller terrorist groups than those conceived in the Postulated Threat. Furthermore, an updated DBT in response to 9/11 took nearly two years to formulate, partly due to the delayed formulation of the Postulated Threat, but also because of "DOE's lengthy comment and review process for developing policy."**[13]** Abraham's proposed annual evaluation of the DBT and possible creation of an elite security force is intended to better prepare DOE to address the post-9/11 world's rapidly changing and increasingly virulent security threats.

Similarly, DOE's consolidation plan for its geographically dispersed weapons-usable nuclear material comes in response to a previously underestimated assessment of terrorist nuclear capabilities. While most terrorist groups would not be capable of building nuclear weapons, a well-organized and well-financed terrorist organization could probably assemble the needed expertise. For such a group, the main barrier to assembling a crude, yet devastating, nuclear weapon is acquisition of sufficient quantities of bomb-usable material: either highly enriched uranium or plutonium. HEU poses a greater security concern than plutonium because only it can fuel the simplest nuclear weapon—a gun-type device—based on the design of the Hiroshima atomic bomb.**[14]** (Plutonium would have to be used in the more technically challenging implosion-type bomb.) If terrorists seized enough nuclear-weapons material, they would most likely transport it to a safe haven where they would attempt to build an Improvised nuclear device (IND), which they would then try to detonate at a high-value target, such as an American city. Another alarming scenario is that suicidal terrorists could storm a DOE nuclear materials storage facility bringing with them a skeletal nuclear device -- a fully assembled nuclear weapon minus the HEU. If they were able to penetrate the security system, the terrorists could quickly try to gather sufficient HEU, assemble it into the skeletal IND, and detonate it within the facility, killing themselves and many more in a short amount of time. By consolidating weapons-grade material to a much smaller number of sites within the nuclear weapons complex and strengthening the security at these sites, DOE would reduce the amount of facilities that terrorists could target and make penetrating nuclear materials storage facilities even more challenging.

Concerns and Recommendations

While the ultimate completion of Secretary Abraham's initiatives will be an overwhelmingly positive achievement, certain concerns remain with the timeliness and order of their implementation. Although the updated DBT addresses elevated security hazards, crucial security upgrades at DOE facilities will probably not be realized until after 2006 or even for another five years.[15] As Stephen I. Schwartz reports in the July/August 2004 edition of the *Bulletin of the Atomic Scientists*, insufficient funding for DOE upgrades and security-related programs largely contributes to these delays. He further highlights what he considers to be DOE's misguided spending policies, which for Fiscal Year 2005, call for DOE "to spend a whopping \$5.6 billion on 'stockpile stewardship'...for programs associated with maintaining the nuclear stockpile and developing new nuclear capabilities." This funding proposal surpasses the average annual spending on comparable programs during the Cold War and makes the few tens of millions of dollars tagged for DBT security spending look puny in comparison. Therefore, Schwartz advises DOE to realign budget priorities and direct more funding and resources to preventing the prevailing nuclear security threat—nuclear terrorism.[16]

Schwartz also criticizes DOE for underestimating the hypothesized size of terrorist attacks in the revised 2003 DBT.[17] Although the details of the DBT are protected information, previous reporting buttresses his concern. For instance, the aforementioned 2004 GAO report underscored this weakness, and the Global Security Newswire reported on September 10, 2003, that while the new DBT has increased the size of the postulated attacking force from that postulated in the pre-9/11 DBT, it still falls substantially short of the size of the 9/11 terrorist force (19 men operating in four cells).[18]

Another serious concern is the apparent prioritization of these initiatives as outlined in Secretary Abraham's speech. While all address important security issues, the most critical threats should be tackled with greater emphasis than lesser ones. For instance, terrorist acquisition of bomb-grade HEU presents hazards that could far outweigh misplaced or lost computer disks. The loss of disks would elevate the probability of malicious individuals or nuclear-aspirant states obtaining sensitive weapons information. However, the concept behind the simplest nuclear bomb is well known, and as previously mentioned, if terrorists acquired sufficient HEU, they would have a high probability of building such a weapon. Therefore, all proposed initiatives must undergo implementation as quickly as possible, but consolidation of bomb-grade nuclear material—with priority placed on HEU—must be the top priority. Another high priority is that all excess HEU should be down blended to a non-weapons-usable form as soon as possible.

In particular, proposed consolidation efforts regarding the Sandia Pulsed Reactor and LLNL need alteration. In line with the Project on Government Oversight's recommendations,[19] a computer simulation system should replace the Sandia Pulsed Reactor far faster than the three-year period contemplated in Secretary Abraham's speech. The reactor experiences limited use; thus, the prompt removal and relocation of HEU reactor fuel to the remote Device Assembly Facility (DAF), located at the Nevada Test Site (NTS), would have minimal negative impact on scientific research. Furthermore, as POGO recommends, DOE should relocate all weapons-grade material at LLNL to the DAF site. DAF is a 100,000-square-foot complex with extensive research and testing facilities capable of satisfying the particular research needs of LLNL scientists. POGO asserts that such a move would save LLNL \$30 million a year while considerably improving the security of the material. Additionally, DOE should seriously consider expanding the HEU and plutonium relocation effort to other DOE and civilian

research facilities that house this material to either the DAF site or Y-12, depending on economic and research feasibility.

DOE's recommendations for permanent removal of TA-18's nuclear-weapon-usable materials to a more secure site are encouraging, but DOE tried unsuccessfully to remove these materials four years ago. In April 2000, responding to internal DOE reports of lax security, then-Secretary of Energy Bill Richardson ordered that "all weapons-grade materials be removed from TA-18 and delivered to the Nevada Test Site by 2003." [20] DOE should ensure that bureaucratic obstacles are cleared to bring this removal and consolidation initiative to a successful and rapid conclusion.

These recommended alterations to DOE's laudable security initiatives provide guidance to help propel them in the most effective direction, so as to best protect citizens from the preventable catastrophe of nuclear terrorism.

[1] Project on Government Oversight (POGO), *U.S. Nuclear Weapons Complex: Security at Risk*, Report, October 2001, available at <http://www.pogo.org/p/environment/eo-011003-nuclear.html>.

[2] U.S. General Accounting Office, *Nuclear Security: NNSA Needs to Better Manage Its Safeguards and Security Program*, GAO-03-471, May 2003. See, also, the follow-on report U.S. General Accounting Office, *Nuclear Security: DOE Faces Security Challenges in the Post September 11, 2001, Environment*, GAO-03-896TNI, June 24, 2003.

[3] Ibid.

[4] Brian Faler, "Nuclear Weapons Lab Loses 12 Keys," *Washington Post*, November 7, 2003.

[5] Mark Hertsgaard, "Nuclear Insecurity," *Vanity Fair*, November 2003, p. 180; see also Associated Press, "Weapons Lab Security Lax, DOE Whistleblower Charges," *Washington Post*, October 7, 2003, p. A5. Two years before the *Vanity Fair* article, the Project on Government Oversight drew attention to security problems raised by the mock attacks conducted by Levernier. Project on Government Oversight, *U.S. Nuclear Weapons Complex: Security at Risk*. Critics of Levernier complained that he had always directed his mock terrorists to exploit weak links. His supporters retort that, of course, "red team" members would not be doing their jobs if they did not target weaknesses. Reportedly, in one of the mock attacks, the red team hauled away weapons-grade material in a Home Depot garden cart. Some laboratory authorities charged that this cart was unfairly used because it was not on the list of approved items for the mock attack. In response, Anson Franklin, a National Nuclear Security Administration spokesperson, stated, "Any implication that there is a 50 percent failure rate on security tests at our nuclear-weapons sites cannot be supported by the facts and is not true. The impression has been given that these tests are staged like football games with winners and losers. But the whole idea of these exercises is to test for weaknesses—we want to find them before any adversaries could—and then make adjustments." Hertsgaard, pp. 180-182.

[6] U.S. Department of Energy Inspection Report, *Protective Force Performance Test Improperities*, January 2004.

[7] Secretary Abraham's May 7th speech from the Department of Energy's website: http://www.energy.gov/engine/content.do?BT_CODE=PR_SPEECHES&TT_CODE=PRESSRELEASE&PUBLIC_ID=15801

[8] U.S. Department of Energy Inspector General Report, *Protective Force Performance Test Improperities*, January 2004. Additional information concerning the inability to repel terrorist intrusions at DOE nuclear facilities can be found in the article: Dave Montgomery, "Security at Nuclear Facilities Questioned," *Star-Telegram*, March 16, 2004.

[9] Program on Government Oversight: "Classified Computer Media Missing at Los Alamos," May 20, 2004: <http://www.pogo.org/p/environment/ea-040502-nuclear.html>.

[10] U.S. General Accounting Office, *DOE Needs to Resolve Significant Issues before It Fully Meets the Design Basis Threat*, GAO-04-623, April 2004: <http://www.gao.gov/new.items/d04623.pdf>.

[11] Robin M. Nazzaro, Director, Natural Resources and Environment Team, General Accounting Office, Testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, published in U.S. General Accounting Office, *Nuclear Security: DOE Must Address Significant Issues to Meet the Requirements of the New Design Basis Threat*, GAO-04-773T, May 11, 2004,

<http://www.gao.gov/new.items/d04773t.pdf>.

[12] Joseph S. Mahaley, Director, Office of Security, Department of Energy, "House Subcommittee on National Security, Emerging Threats, and International Relations Committee on Government Reform," June 24, 2003: http://www.energy.gov/engine/content.do?BT_CODE=PR_CONGRESSTEST&TT_CODE=PRESSRELEASE&PUBLIC_ID=13606.

[13] Hertsgaard, "Nuclear Insecurity."

[14] *The Four Faces of Nuclear Terrorism* (Center for Nonproliferation Studies, Monterey Institute of International Studies and the Nuclear Threat Initiative, 2004) by Charles D. Ferguson, William C. Potter, Amy Sands, Leonard S. Spector, and Fred L. Wehling discusses in detail the need for a lesser amount of HEU at fewer sites around the world and fewer locations containing HEU at each site.

[15] "U.S. Energy Department Likely to Miss Deadline, GAO Reports," Global Security Newswire, April 28, 2004, <http://www.nti.org/d%5Fnewswire/issues/2004/4/28>

[/1b3b7b98%2D33ff%2D4abc%2D9eb2%2Dbc811dac10b2.html](http://www.nti.org/d%5Fnewswire/issues/2004/4/28/1b3b7b98%2D33ff%2D4abc%2D9eb2%2Dbc811dac10b2.html).

[16] Stephen I. Schwartz, "A Slow Sort of Security," *Bulletin of the Atomic Scientists*, July/August 2004

[17] Schwartz quotes Congressman Shays as saying, "A serious question remains whether the DBT adequately reflects the true nature of the threat...Some believe the [DBT] might be more accurately called the 'dollar basis threat,' reflecting only a watered-down measure of how much security the [Energy] Department can afford." Ibid.

[18] "Poor Management, Training, Hampers Lawrence Livermore Laboratory's Security Force," Global Security Newswire, September 10, 2003, <http://www.nti.org/d%5Fnewswire/issues/2003/9/10/6s.html>.

[19] "Testimony of POGO's Danielle Brian Before the House Energy and Commerce Subcommittee on Oversight and Investigation," Project on Government Oversight, May 11, 2004:

<http://www.pogo.org/p/environment/et-040501-nuclear.html>.

[20] Hertsgaard, "Nuclear Insecurity," op. cit. p. 188.

[» Issue Introduction](#) [» Issue Brief](#) [» Relevant Resources](#)

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
DUKE ENERGY CORPORATION) Docket Nos. 50-413-OLA
) 50-414-OLA
)
(Catawba Nuclear Station)
Units 1 and 2)

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE IN OPPOSITION TO BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE'S MOTION TO RE-OPEN THE RECORD ON SECURITY CONTENTION 5" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class; or as indicated by an asterisk (*), by deposit in the Nuclear Regulatory Commission's internal mail system; and by e-mail as indicated by a double asterisk (**), this 15th day of February, 2005.

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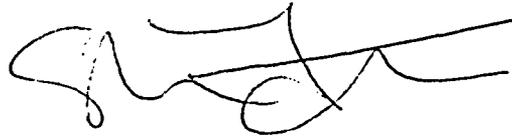
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